July 1, 1960

Mr. Richard J. Elkus, Trustee
Ampex Foundation
934 Charter Street
Redwood City, California

Dear Mr. Elkus:

Thank you for your letter of June 24, just received. Although we naturally regret the Foundation's decision, in view of the urgency of the need for expanded use of radio as well as television for education, we understand and respect that decision.

Our sincere thanks for the Foundation's consideration and courtesy.

Sincerely,

H. J. Skornia

Harry J. Skornia
President

HJS:jl

CC: NAEB Board and Development Committee
NAEB Radio Network Committee

P.S. to CC recipients: This being the case, we are proceeding with purchase of necessary (but minimum) new equipment, as instructed by the Board.

FES — from Dave Stewart Report SREB [n.d.]

ETV Foundation and Industry Support (all is public information)

1) Foundations:
   Including Ford & FAE, Rosenburg, Mellon, etc; (20 or so in all) — $15,700.00

2) Public Funds: Legislative , college, public school — $12,032,000

3) Commercial concerns (GE, Storer, Emerson, KING, WKY, etc.) — $ 4,500,000

4) Industry (John Hancock, Sears, etc.) — $ 4,750,000

5) Other sources: PTA, Junior League, American Chemical Society, private and parochial schools, etc. — $ 5,000,000

GRAND TOTAL — $41,982,610

FES

TFAE Grants (for testing of TV as Teaching Tool)

Case Institute of Technology, Cleveland		$20,000
Chicago Public Schools		$50,000
Junior College Program 2 grants		$165,000
New York University		$52,000
Pennsylvania State	(1) (2)	$43,845 ?
St. Louis		$95,110
San Francisco State College		$125,000
Schenectady (closed circuit)		$10,000
Texas Teacher Training Program (3 year programs over 15 commercial stations)		$287,000

DATE _____ FROM Hyde

To:

HJS	DT
Hyde ✓ HEH	MR
REU	JT
FES	ZU
RS	GB
JL	BMC
	NEWSLETTER

OTHER: _____

_____

_____ FOR YOUR INFORMATION
_____ TO BE DISCUSSED
_____ FOR SIGNATURE
_____ PLEASE HANDLE
✓ FILE
_____ COMMENT AND RETURN
_____ RETURN
_____ SUPPLY BACKGROUND INFO.
_____ OTHER

*****

Delayed 10 days by various things -- but finally sent.

14 Gregory Hall
Urbana, Illinois

August 26, 1960

Mr. James W. Armsey
Associate Program Director
Education Division
The Ford Foundation
477 Madison Avenue
New York 22, New York

Dear Jim:

On May 6, 1959, Mr. Joseph M. McDaniel, Jr., Secretary of the Ford Foundation, kindly authorized us an extension of "approximately two years" on the balance remaining in our June 27, 1957 grant. This balance amounted to $3362.35.

In our request for permission to use this balance we stated that it would be used for the same type of activity which had been covered in the original grant.

I take pleasure in submitting to you now a statement showing how that balance was spent.

In the attached statement, most of the early entries (July 10, September 8, September 14, October 10, November 12 etc.) were for late bills in connection with the Children's Program Seminar, scheduled and held, as originally planned, with Ford Foundation funds.

Several of the other items (August 27, September 24, and October 23) were for the providing of the type of consultation service carried out under the original grant. These were to assist with a workshop, related to Fund for Advancement efforts in in-school TV; consultation intended to advance planning for an Ohio ETV network; and defraying a portion of expenses for Mr. Jack McBride, as a speaker at the dedication of the new stationnat Des Moines, Iowa, KDPS.

The balance of the expenses listed were for a special project to meet a need expressed by TV station managers almost unanimously: the development of Utilization "kits" for classroom instruction.

We are proceeding with this project at our own expense, and are requesting funds from the U. S. Office of Education to continue it. However, it is thanks to the funds from the Ford Foundation that preliminary steps and studies have been made which make it now appear likely that this need can be met. Further reference to this project will be found on page 29 of the 1959-1960 Annual Report, a copy of which is attached.

We had set ourselves the deadline of June 30 for expenditures from these funds, and, as will be noted, this balance was fully exhausted.

On behalf of the NAEB, and especially those educators who, through us, have profited from your generous grants, I should like to express our sincere appreciation.

Since a final report was earlier made on the grant here involved -- with the exception of the balance of $3,362.35, I trust no further report will be needed. A copy of that report, as earlier submitted, is enclosed herewith, for your convenience, together with the NAEB Annual Report for 1959-1960, referred to above. If additional information is needed, I shall be most happy to provide it.

Sincerely yours,

Harry J. Skornia
President

HJS:jl
Enclosures — attached
— earlier Ford Report
— 1959-60 Annual Report.

FORD FOUNDATION GRANT

(REPORT ON SURPLUS AS OF JUNE 30, 1959)

BALANCE		$3362.35
EXPENDITURES		
1959 JULY 10	MILLS PUBLICATIONS - FIRST ORDER OF 1000 COPIES, CHILDREN AND TELEVISION BY DALE HARRIS	$597.50
AUG. 27	NORTH CAROLINA IN-SCHOOL TV EXPERIMENT, CONTRIBUTION TO WORKSHOP	500.00
SEPT. 8	ROBERT RIPPEN - CONSULTANT - CLOSED CIRCUIT TELEVISION SEMINAR	50.00
SEPT. 8	RHEA SIKES - CONSULTANT - CLOSED CIRCUIT TELEVISION SEMINAR	50.00
SEPT. 14	RUDY BRETZ - CONSULTANT - CLOSED CIRCUIT TELEVISION SEMINAR	472.51
SEPT. 24	OHIO WESLEYAN UNIVERSITY - TECHNICAL CONSULTATION - MR. BLUEM	200.00
OCT. 10	MILLS PUBLICATIONS - SECOND ORDER OF 1000 COPIES, CHILDREN AND TELEVISION BY DALE HARRIS	314.20
OCT. 23	JACK McBRIDE - TO ATTEND KDPS DEDICATION	37.05
NOV. 12	UNIVERSITY OF ILLINOIS - TELEPHONE CALLS CHARGED THROUGH THE UNIVERSITY	47.45
1960 FEB. 11	HAROLD E. HILL - LUNCHEON MEETING WITH HARRY J. SKORNIA, HAROLD E. HILL AND CLAIR TETTEMER	6.50
MARCH 2	CLAIR TETTEMER - TRAVEL TO CHAMPAIGN REGARDING UTILIZATION KITS	113.32
MARCH 16	CLAIR TETTEMER - TRAVEL TO CINCINNATI REGARDING UTILIZATION KITS	183.86
MAY 16	CLAIR TETTEMER - TRAVEL TO CHICAGO REGARDING UTILIZATION KITS	69.68
MAY 19	UNIVERSITY OF ILLINOIS - TELEPHONE CALLS CHARGED THROUGH THE UNIVERSITY	2.45

May 19 -	Clair Tettemer - travel to IERT, Utilization Committee meeting	$ 16.82	
June 14 -	Station KSLH - charges regarding Utilization Kits	120.57	
June 29 -	Twin City Area ETV Corporation - consultation services and various expenses, Clair Tettemer	575.00	
June 29 -	Postage and Supplies by Headquarters	49.74	
			$3406.65
	Balance (overdrawn)		$ -44.30

on original — — added a certification, notarized etc.

THE FORD FOUNDATION
477 MADISON AVENUE
NEW YORK 22, N. Y.

RECEIVED
NAEB HEADQUARTERS
SEP 1 1960
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

August 30, 1960

Mr. Harry J. Skornia, President
National Association of Educational Broadcasters
14 Gregory Hall
Urbana, Illinois

Dear Harry:

Thanks for your August 26 letter. I think it winds up the report on the June 27, 1957 grant in good shape. No further information is needed.

I think you and your colleagues can be proud of the work you have done in the professional development of education by television and radio.

I am told that you will soon leave NAEB to join the faculty of the University of Illinois. If this be so, I wish you continued professional accomplishment and personal satisfaction in your work.

Sincerely,

James W. Armsey

JOAN:

You'll recall I asked our Boardfor suggestions for names which might be added to the earlier list we sent the Ford Fdn. Please check the attached against the list we have already sent, to avoid duplication, and then hold until later this week when we will have recd word from other Board members. At that time, you can type up a new, supplementary list, and send it to the gal at Ford for me.

heh
4/17/61

14 April 1961

Mrs. Lilian D. Plante
Office of Reports
Ford Foundation
477 Madison Avenue
New York 22, New York

Dear Mrs. Plante:

Mr. David Stewart, Secretary of the Joint Council on Educational Broadcasting, has informed us that the Foundation will be happy to send copies of your forthcoming report on educational television to approximately 150 individuals whom we might designate.

I have enclosed a list of approximately 85 names for this purpose. Within a week we will send you a supplementary list of 70 or so more names.

Sincerely,

Harold E. Hill
Administrative Vice President

Enc.
cc: Mr. David Stewart
Mr. Richard Hull
HEH:jph

Raymond D. Hurlbert
General Manager
Alabama Educational TV Commission
807 Protective Life Building
Birmingham, Alabama

John W. Dunlop
Studio Director
Auburn University
Auburn, Alabama

Dr. L. Frazer Banks
Studio Director
Birmingham Area ETV Association
720 S. 20th Street
Birmingham, Alabama

Graydon Ausmus
Studio Director
University of Alabama
Box X
University, Alabama

Richard H. Bell, Director
Bureau of Broadcasting
KAET-TV
115 Engineering Center
Phoenix, Arizona

Ben C. Markland, Director
Radio-TV Bureau , KUAT-TV
Herring Hall
University of Arizona
Tucson, Arizona

John C. Crabbe, Gen. Manager
Central California ETV Inc.,
KVIE-TV
P.O. Box 6
Sacramento, California

James Day, Gen. Manager
Bay Area Educational TV Association
KQED-TV
525 Fourth Street
San Francisco, California

Howard L. Johnson, Exec. Director
Denver Public Schools
KRMA-TV
414 14th Street
Denver, Colorado

Gregory W. Heimer,
TV Coordinator
WJCT-TV
Educational Television Inc
605 Ocean Street
Jacksonville, Florida

Clif Mitchell, Director
WTHS-TV (Board of Public Instruction of Dade County)
1410 NE Second Avenue
Miami, Florida

Roy Flynn, Director
University Broadcasting Services
Florida State University
WFSU-TV
Graduate Building
Tallahassee, Florida

R. LeRoy Lastinger, Gen. Manager
Florida West Coast ETV, Inc.,
WEDU-TV
908 South 20th Str
Tampa, Florida

Haskell Boyter, Director
Radio & TV Education
Atlanta Board of Education
WETV-TV
740 Bismark Road, NE
Atlanta, Georgia

Gerard L. Appy, Assoc. Director
Univ. of Georgia Center for Continuing Education
WGTV-TV
Athens, Georgia

Dr. John W. Taylor, Exec. Director
Chicago Educational Television Assoc.
WTTW-TV
1761 E. Museum Drive
Chicago, Illinois

Frank E. Schooley, Director
University Broadcasting
WILL-TV
227 Gregory Hall
University of Illinois,
Urbana, Illinois

Clifton F. Schropp, Manager
Des Moines Public Schools
KDPS-TV
1800 Grand Avenue
Des Moines, Iowa

Jack M. Burke, Acting Head
Dept., of Radio - Television
Kansas State University
KSAC-TV
Nichols Gym
Manhattan, Kansas

Dorothy L. Day, Manager
Louisville Free Public Library
WFPK-TV
Fourth & York Streets
Louisville, Kentucky

Duff Browne, Gen. Manager
Greater New Orleans ETV Foundation
WYES-TV
916 Navarre
New Orleans, Louisiana

Hartford N. Gunn, Jr., Gen. Manager
Lowell Institute Cooperative Broadcasting Council
WGBH-TV
84 Massachusetts Avenue
Cambridge 39, Mass

T.V. Waber, Exec. Secretary
Detroit Educational Television Foundation, Inc
WTVS-TV
18323 James Couzens
Detroit, Michigan

Patrick J. Callahan, Station Manager
WMSB-TV
Michigan State University
600 Kalamazoo Street
East Lansing, Michigan

Dr. John C. Schwarzwalder, Gen. Manager
KTCA-TV
Twin City Area Educational Television Corp.
1640 Como Avenue
St. Paul 13, Minnesota

Henry F. Chadeayne, Exec. Director
KETC-TV
St. Louis Educational TV Commission
6996 Millbrook Boulevard
St. Louis, Missouri

Jack McBride,
Director of Educational TV
KUON-TV
University of Nebraska
Temple Building
Lincoln, Nebraska

Keith J. Nighbert, Manager
WENH-TV
University of New Hampshire
Memorial Union
Durham, New Hampshire

Dr. F. Claude Hempen, Station Manager
Regents of the University of New Mexico & the
Albuquerque Board of Education (KNME-TV)
1801 Roma
Albuquerque, New Mexico

Roy J. Johnston, Chairman
Directorate of TV
WUNC-TV Building
North Carolina State College
Chapel Hill, North Carolina

John Young
Director of TV
Swain Hall
University of North Carolina
Chapel Hill, North Carolina

Emil W. Young, Jr.
Director of TV
Woman's College
Greensboro, North Carolina

Uberto T. Neely, Gen. Manager
Greater Cincinnati TV Educational Foundation
WCET-TV
2222 Chickasaw Street
Cincinnati, Ohio

Richard B. Hull, Director
Radio & TV Broadcasting
Ohio State University
WOSU-TV
215 W. 19th Avenue
Columbus, Ohio

Dr. Stephen C. Hathaway
Director of Broadcasting
Radio-TV Center
WMUB-TV
Miami University,
Oxford, Ohio

Harry D. Lamb, Gen. Manager
Greater Toledo ETV Foundation
WGTE-TV
1901 W. Central Avenue
Toledo, Ohio

John W. Dunn, Director
Oklahoma ETV Authority
KETA-TV
Box 2005
Oklahoma City, Oklahoma

Dr. Bill Lillard, Director
Broadcasting Center
KOKH-TV
1801 North Ellison
Oklahoma City, Oklahoma

James M. Morris, Director
Educational Radio & Television
Oregon State System of Higher Education
KOAC-TV
Corvallis, Oregon

Richard S. Burdick, Managing Director
Metropolitan Philadelphia Educational Radio & TV
WHYY-TV
1622 Chestnut Street
Philadelphia, Pennsylvania

William Dempsey, Manager
Metropolitan Pittsburgh Educational Television Station
WQED-TV
4337 Fifth Avenue
Pittsburgh, Pennsylvania

Martin Busch, General Manager
KUSD-TV
University of South Dakota
Vermillion, South Dakota

Ernest C. Ball, Managing Director
Memphis Community Television Foundation
WKNO-TV
268 Jefferson Avenue
Memphis, Tennessee

Martin Campbell, Exec. Director
Area ETV Foundation
KERA-TV
3000 Hines Boulevard
Dallas, Texas

John A. Larsen, Station Director
Weber County School District
KWCS-TV
1122 Washington Boulevard
Ogden, Utah

Dr. Keith M. Engar, Manager
KUED-TV
University of Utah
101 Music Hall
Salt Lake City, Utah

Roy E. Barthold, Manager
KUHT-TV
University of Houston
3801 Cullen Boulevard
Houston, Texas

Loren Stone, Manager
KCTS-TV
University of Washington
Seattle, Washington

H.B. McCarty, Director
WHA-TV
University of Wisconsin
Madison, Wisconsin

James C. Wulliman, Operations Manager
Milwaukee Vocational & Adult Schools
WMVS-TV
1015 North Sixth Street
Milwaukee, Wisconsin.

Dr. Kenneth A. Christiansen
Director of Television
School of Journalism & Communications
University of Florida
Gainesville, Florida

Leslie P. Greenhill, Assoc. Director
Division of Academic Research & Services
405 Old Main Building
Pennsylvania State University
University Park, Pa

Dr. Harry J. Skornia
Associate Professor of Radio & Television
24 Gregory Hall
University of Illinois
Urbana, Illinois

Albert P. Fredette, Station Manager
WAMC
Albany Medical College
47 New Scotland Avenue
Albany, New York

James S. Miles, Director
WBAA Radio-TV Unit
Hall of Music
Purdue University
Lafayette, Indiana

Carl Menzer, Station Director
WSUI, KSUI
State University of Iowa
Iowa City, Iowa

William G. Harley, President
NAEB, Suite 1119
1346 Connecticut Avenue, N.W.
Washington 6, D.C.

Mr. Harold E. Hill, Adm. Vice President
NAEB - Suite 1119
1346 Connecticut Avenue, N.W.
Washington, 6, D.C.

R. Edwin Browne, Director
Stations KFKU & KANU
EES Building
University of Kansas
Lawrence, Kansas

Ken Kager, Operations Manager
Station KUOW
325 Communications Building
University of Washington
Seattle, Washington

Mr. Vernon Bronson
Survey Coordinator
NAEB
Suite 1119
1346 Connecticut Avenue, N.W.
Washington 6, D.C.

[illegible]
General Manager
ETV Center
1002 Millwood Avenue
Columbia, South Carolina

Harold J. Stamberger
Assistant to the President
West Virginia University
Morgantown, West Virginia

Mrs. Kathleen Lardie, Manager
WDTR
Detroit Board of Education
9345 Lawton Avenue
Detroit, Michigan

W.D. Donaldson
Station KTCA
1640 Como Avenue
St. Paul, Minnesota

Edward Schten
Supervisor of Research
State Legislative Research Committee
State Capital Building
Frankfurt, Kentucky

Edward Wegener
Nashville Educational Television Foundation
810 Broadway
Nashville, Tennessee

Robert Schenkkan
Director of Radio/Television
Box 8038
University of Texas
Austin, Texas

Dr. M.F. Peterson
Superintendent of Public Instruction
State Department of Public Instruction
Bismarck, North Dakota

Mr. Erling Jorgensen
Radio-TV Studios
Montana State University
Missoula, Montana

Dr. Velma Lynford
Superintendent of Public Instruction
State Capital Building
Cheyenne, Wyoming

Dr. Kenneth Oberholtzer
Superintendent of Schools
Denver Public Schools
4114 14th Street
Denver, Colorado

Dr. Byron F. Stettler
Superintendent of Public Instruction
State Department of Education
Carson City, Nevada

Ralph Steetle
Oregon State System of Higher Education
General Extension Division
1633 Southwest Park Avenue
Portland, Oregon

Dr. W.W. Snyder
Radio-TV Center
University of Idaho
Moscow, Idaho

Gordon Canterbury
Station KLSE
P.O. Box 2684
Monroe, Louisiana

Mr. T.E. Tyler
105 West 12th Street
Little Rock, Arkansas

Dr. W. M. Carmack, President
Mississippi State University
State College, Mississippi

Dr. Neal V. Matsumoto
Deputy Superintendent
Department of Public Instruction
Harrisburg, Pennsylvania

Mr. William King
Division of A-V Instruction
State Department of Education
Trenton, New Jersey

Mr. William Brish
Superintendent of Schools
Washington County Public Schools
Hagerstown, Maryland

Dr. William R Wood, President
University of Alaska
College, Alaska

Dr. William M. Gordon
Superintendent of Public Instruction
State Department of Public Instruction
Honolulu, Hawaii

Mr. Candido Oliveras
Secretary of Education
Department of Education
Vela Street, Stop 34
Hato Rey, Puerto Rico

Ewald B. Nyquist
The University of the State of New York
The State Education Department
Albany 1, New York.

Mr. R.M. Jefferies, Jr., Chairman
South Carolina Educational Television Commission
Barnwell, South Carolina

Dr. Charles Boehm
Superintendent of Public Instruction
State Committee on Educational Television
Commonwealth of Pennsylvania
Box 911
Harrisburg, Pennsylvania

Mr. Charles S. Lewis, Chairman
Commission on Educational Television
Director of Public Affairs
WCAX-TV
Burlington, Vermont

Mr. Joe Morgan, Commission of Education
Tennessee Educational Television Commission
Cordell Hull Building
Nashville, Tennessee

Daniel A. Keeler, Director
Educational Television
State Department of Public Instruction
State Capitol Building
Salt Lake City, Utah

Senator Laurin Jones, Chairman
Committee on Educational Television
Kansas State Legislation Council
State Capitol Building
Topeka, Kansas

James Etheridge, Jr.
Executive Secretary
Florida Educational Television Commission
Room 112
Knott Building
Tallahassee, Florida

Dr. E.E. Holt,
State Superintendent of Public Instruction
Chairman, Executive Committee
Ohio State Commission on ETV
Columbus,, Ohio

28 April 1961

Mrs. Lilian D. Plante
Office of Reports
Ford Foundation
477 Madison Avenue
New York 22, New York

Dear Mrs. Plante:

I am enclosing herewith a further list of 34 names to be included in your mailings of the report on educational television.

May I thank you very much in advance for the beautiful copies we received in our office today from the Ford Foundation.

Sincerely,

Secretary to
Administrative Vice President

Enc.

Judson Freeman, Chairman
Florida Educational Television Commission
701 Florida National Bank Building
Jacksonville, Florida

J. Kenneth Ballinger
Florida Educational Television Commission
Center Building
Tallahassee, Florida

4-28
(34 names)

Floyd T. Christian
Florida Educational Television Commission
305 Haven Street
Clearwater, Florida

J. J. Daniel
Florida Educational Television Commission
Buckman Building
206 W. Forsythe Street
Jacksonville, Florida

Miles Trammell, Chairman
Committee on Engineering Services
Florida Educational Television Commission
1401 N. Bay Causeway
North Bay Village
Miami, Florida

James L. Wattenbarger
Florida Educational Television Commission
State Department of Education
Tallahassee, Florida

Stan Witwer, Vice Chairman
Florida Educational Television Commission
c/o The St. Petersburg Times
440 First Avenue S.
St. Petersburg, Florida

Dr. Myron Blee
Florida Educational Television Commission
Board of Control
State of Florida
Tallahassee, Florida

James Etheridge, Jr., Executive Secretary
Florida Educational Television Commission
Room 112, Knott Building
Tallahassee, Florida

Dr. Lyle Stewart
Seattle Public Schools
815 4th Street N.
Seattle 9, Washington

Dr. J. Broward Culpepper, Executive Director
Board of Control
State of Florida
Florida State University Campus
Tallahassee, Florida

Thomas E. Bailey
Superintendent of Public Instruction
State of Florida
Capitol Building
Tallahassee, Florida

Dr. Milton Carothers, Vice President
Florida State University
Tallahassee, Florida

Dr. Harry Philpott, Vice President
University of Florida
Gainesville, Florida

Dr. J. Wayne Reitz, President
University of Florida
Gainesville, Florida

Dr. Gordon Blackwell, President
Florida State University
Tallahassee, Florida

Dr. John Allen, President
South Florida University
Tampa, Florida

Dr. F. L. Hovde, President
Purdue University
Executive Building
Lafayette, Indiana

William E. Wilson
Superintendent of Public Instruction
State House
Indianapolis, Indiana

Harold E. Wood
W. First National Bank Building
St. Paul, Minnesota

A. A. Heckman
W. First National Bank Building
St. Paul, Minnesota

Ronald M. Hubbs
385 Washington Street
St. Paul, Minnesota

Joseph T. McDermott
KTCA-TV, 1640 Como Avenue
St. Paul, Minnesota

Chris Donaldson
KTCA-TV, 1640 Como Avenue
St. Paul, Minnesota

Loring M. Staples
1260 Northwestern Bank Building
Minneapolis, Minnesota

Dr. George F. Budd, President
St. Cloud State College
St. Cloud, Minnesota

Dean George R. Town
Marston Hall
Iowa State University
Ames, Iowa

Dean E. W. Ziebarth
135 Johnston Hall
University of Minnesota
Minneapolis, 14, Minnesota

Martin J. McGowan
c/o Appleton Press
Appleton, Minnesota

Jerry Savage, Executive Secretary
New Jersey ETV Corp.
444 Terrace Ave.
Hasbrouck Heights, New Jersey

Dr. F. P. Thieme
University of Washington
Seattle, 5, Washington

Mrs. Arthur Skelton
5415 Beach Drive SW
Seattle 16, Washington

L. M. Dimmitt
King County Schools
County-City Building
Seattle 4, Washington

Dr. Ray Howard
Shoreline Public Schools
E. 158th & 20th NE
Seattle, Washington

HEW
F-11

OFFICE OF REPORTS

THE FORD FOUNDATION
477 MADISON AVENUE
NEW YORK 22, N.Y.

May 3, 1961

Miss Joan P. Hughes
NAEB
DuPont Circle Office Building
1346 Connecticut Avenue, N.W.
Washington 6, D.C.

Dear Miss Hughes:

Thank you for your letter of April 28 attaching the list of names to receive our latest booklet on educational television.

Thanks, too, for the nice things you had to say about the booklet itself.

Yours truly,

Lilian D. Plante

Lilian D. Plante

LDP/vv

May 12, 1961

Mrs. Liliam D. Plante
Office of Reports
Ford Foundation
477 Madison Avenue
New York 22, New York

Dear Mrs. Plante:

If it is not too late, we have several additional names which we would appreciate being included on the mailing of the report on educational television.

Mrs. Irene R. Saliman
1531 Lowell Blvd.
Denver 4, Colorado

Mr. Frank Traylor
414 14th Street
Denver 2, Colorado

Mrs. Lois Babbitt Heath
2212 Ash
Denver 7, Colorado

Mr. Francis M. Bain
524 Security Life Building
810 14th Street
Denver 2, Colorado

Mr. Palmer L. Burch
226 Majestic Bldg.
209 16th Street
Denver 2, Colorado

Mr. Isadore Samuels
620 Petroeum Club Bldg.
110 16th Street
Denver 2, Colorado

Governor Steve McNichols
State Capitol Building
Denver 2, Colorado

Dr. Byron W. Hansford
Commissioner of Education
State of Colorado
Denver 2, Colorado

Mr. Del Carnes
Television Editor
The Denver Post
Denver, Colorado

Mr. Lloyd King, President
King Soopers, Inc.
1400 West Third Avenue
Denver, Colorado

Thank you very much for your kind attention to this.

Sincerely yours,

Mary Elizabeth McIlvane
Administrative Assistant

m

PROGRAMED BY COUNCIL FOR EDUCATIONAL TELEVISION

CHANNEL 6, Inc.

OFFICE OF EXECUTIVE DIRECTOR
414 FOURTEENTH STREET
DENVER 2, COLORADO

May 8, 1961

RECEIVED
NAEB HEADQUARTERS
MAY 11 1961
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

Mr. Harold E. Hill
Administrative Vice President
National Association of
Educational Broadcasters
1346 Connecticut Avenue, N. W.
Washington 6, D. C

Dear Harold:

I may be somewhat late in submitting names for a list of persons to receive a recent report on educational television from the Ford Foundation. However, I do wish to submit the following names, should additional copies be available.

Mrs. Irene R. Saliman
1531 Lowell Blvd.
Denver 4, Colorado

Mr. Frank Traylor
414 - 14th Street
Denver 2, Colorado

Mrs. Lois Babbitt Heath
2212 Ash
Denver 7, Colorado

Mr. Francis M. Bain
524 Security Life Bldg.
810 Fourteenth Street
Denver 2, Colorado

Mr. Palmer L. Burch
226 Majestic Bldg.
209 Sixteenth Street
Denver 2, Colorado

Mr. Isadore Samuels
620 Petroleum Club Bldg.
110 Sixteenth Street
Denver 2, Colorado

Governor Steve McNichols
State Capitol Building
Denver 2, Colorado

Dr. Byron W. Hansford
Commissioner of Education
State of Colorado
Denver 2, Colorado

Mr. Del Carnes
Television Editor
The Denver Post
Denver, Colorado

Mr. Lloyd King, President
King Soopers Inc.
1400 West Third Avenue
Denver, Colorado

Very sincerely yours,

Howard L. Johnson
Executive Director

HLJ:pm

THE FORD FOUNDATION
477 MADISON AVENUE
NEW YORK 22, N. Y.

RECEIVED
MAY 18 1961

OFFICE OF REPORTS

May 16, 1961

Miss Mary Elizabeth McIlvane
Administrative Assistant
National Association of Educational
Broadcasters
DuPont Circle Office Building
1346 Connecticut Avenue, N.W.
Washington 6, D.C.

Dear Miss McIlvane:

Thank you very much for sending us the additional names of people to receive our booklet on educational television. Copies of the booklet were sent to them today under separate cover.

Your interest is appreciated.

Sincerely,

Lilian D. Plante

Lilian D. Plante

LDP:rm

RECEIVED
NAEB NEWS DIRECTORS
AUG 13 1962

THE FORD FOUNDATION
477 MADISON AVENUE
NEW YORK 22, N. Y.

August 9, 1962

Mr. Shigenari Futagami
TV School-broadcast Division
Nippon Hoso Kyokai
Uchisaiwai-cho, Chiyoda-Ku
Tokyo, Japan

COPY

Dear Mr. Futagami:

I do apologize for the delay in replying to your letter of May 15th, but the films you requested have been out on loan until recently and I delayed writing to you until I was in a position to send all your requests.

I am mailing through our brokers this week the following films:

1. "Teaching by Television" - 2nd Grade Music
2. "Teaching by Television" - 4th Grade Science
3. "Teaching by Television" - 9th Grade History
4. "Exploring Nature" - 21" Classroom - WGBH-TV
5. 6th Grade Arithmetic - Detroit Public Schools
6. 12th Grade American Literature - Detroit Public Schools
7. "DNA Molecule and Reproduction" - special production - Toronto, June 1962

The last film, "DNA Molecule and Reproduction", you did not request, but I am sending it as I think it will be of special interest. The Foundation organized a "workshop" or conference last June in Toronto in ETV Production Techniques. Several representatives of American school television attended and it was planned in cooperation with the Canadian Broadcasting Corporation. This television lesson was produced at the workshop. The teacher is from the U. S. A. and does teach on television for the Philadelphia Public Schools. The program, however, was directed by a member on the staff of the Canadian Broadcasting Corporation. A Mr. Sandy Lumsden from CBC, Halifax. The Foundation is at present using

the funds available for instructional television in various ways, but with the ~~similar~~ primary aim to improve the quality of programs. The production was planned with precisely this aim in mind. There are no credits on the film so we should be glad if when you screen it you do make known to the audience the special circumstances of this production.

I should also like to ask you to do one favor for us. As you probably do know, a Regional Training Course on Educational Television in South and East Asia is to be held in Tokyo from August 27th to September 22 of this year. Unesco has asked us to send some representative kinescopes and I should be grateful if you could make available to Unesco the three "Teaching by Television" kines and "DNA Molecule and Reproduction." The office to contact in Tokyo is:

Japanese National Commission for Unesco
4-3, Kasumigaseki
Chiyoda-Ku
Tokyo, Japan

We can let you keep the films for a period of six months and therefore suggest that you return them to us in March, 1963.

With reference to clearance of the films, the only film requiring clearance would be "Exploring Nature" and we would be willing to approach WGHB should you desire us to do so.

We look forward to receiving films in exchange from you and do appreciate your cooperation.

Sincerely,

Brenda A. Cox

Brenda A. Cox
Staff Assistant
Education Program

BAC:jm
cc: Japanese National Commission for UNESCO
Mr. Richard Burdick, TV Station Manager, WHYY,
Philadelphia, Pa.
X Mr. William Harley, XNAEB, Washington
Records Center
Central Sec't #26675

December 19, 1961

Mr. William J. Lewis
Director
Ford Foundation ETV Project in Vermont
Pomeroy Hall
University of Vermont
Burlington, Vermont

Dear Mr. Lewis:

Returning from a trip abroad I found your letter together with a carbon of a reply from Dave Stewart. Mr. Stewart has covered the waterfront so well I feel there is not much I can add in response to your questions. All of your suggestions are excellent and I trust that you will follow through as you have indicated.

I feel very strongly that this is the critical time for this legislation. I doubt if there will ever be as good a chance again; and likelihood of success is, in large measure, going to depend upon whether there is early consideration by the Rules Committee of this legislation so that the House will have a chance to consider it. Unless he can get action very early in the session, there is not much likelihood of obtaining any action on ETV during this Congress.

I agree with Mr. Stewart's estimation of the members of the Rules Committee who are likely to be opposed or, at least, doubtful. I suspect not much can be done with Mr. Avery or Mr. Brown, but it doesn't hurt to try.

Obviously, initial attention must be given to the Rules Committee, since action by this group is a prerequisite to any further action. However, there will not be time to make a proper contact with members of the House after the Rules Committee acts, so it is important to contact your Representatives now so that they can be alerted and, hopefully, in a receptive mood if and when the bill gets to the House.

We appreciate your suggestions and will be pleased to receive any other ideas which may occur to you for advancing this legislation.

Sincerely yours,

William G. Harley

WGH:mem

NAEB

etv

A Ford Foundation Pictorial Report

etv A Ford Foundation Pictorial Report

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This is one of a series of booklets on activities supported by the Ford Foundation. The purpose is to present informally and in a general, nontechnical way the story of some phase of the Foundation's work. Additional copies may be obtained from the Ford Foundation, Office of Reports, 477 Madison Avenue, New York 22, N. Y.

Library of Congress Card No. 61-11205 March 1961

The national enterprise known as educational television, or ETV, *employs thousands of people, uses facilities worth hundreds of millions of dollars, and reaches millions of men, women, and children.*

Its motivation is noncommercial. It seeks to educate, although ETV *sometimes entertains in the sense that learning may be a delight as well as a discipline. It regards the audience not as a passive mass but as active viewers with diversified interests and abilities.* ETV *aims to provide experiences that change the viewer by either serving his educational, cultural, or vocational interests, altering his prejudices or perspectives, or making him sensitive to his place in society.*

ETV *is of two principal kinds. One, known by such terms as "instructional television" or "in-school television," consists of les-*

It happens to be Thursday, March 31, 1960:

2 p.m. in Lincoln, Nebraska. Hobart Hays puts the finishing touches to a three-foot model of the Globe Theatre of Shakespeare's London. Hays, an artist for the Nebraska in-school television project, has detailed the model down to the galleries, inner stage, and cupola. In a few minutes, the television camera lens will explore it at close range while Miss Esther Montgomery, who teaches a three-day-a-week high-school English course on television, lectures on *Hamlet*. She will also play a record of actor John Gielgud reading parts of Act II as the screen shows photographs of him and other eminent actors playing Hamlet. Hundreds of students in the Lincoln area will watch as a television teacher re-creates the mood of the Elizabethan theater and times.

10 a.m. Turning in the Bible to Kings II, chapter 2, verse 8, John Morris finds the passage: "And Elijah took his mantle, and wrapped it together, and smote the waters, and they were divided hither and thither . . ." Morris is production manager of WCET, the ETV channel in Cincinnati. Later the citation will be lettered on a placard for a program titled, "The Jordan Rift." The program is part of "Archaeology and the Bible," a sixteen-week series telecast by WCET to Cincinnati and northern Kentucky and later by ETV stations throughout the country. The series is conducted by Dr. Nelson Glueck, world-famous Biblical scholar and archaeologist.

sons and courses regularly taught by television for credit in schools and colleges. The other, known as "adult programming" or "community television," consists of programs for the general public.

Familiarity with ETV *depends on where one lives. Around Pittsburgh, for example,* ETV *is a part of everyday life. Through Pittsburgh's two* ETV *channels, adult programming reaches an audience of one million, and in 3,566 classrooms students are taught partly by television. In other communities,* ETV *exists for teaching but not for general viewers, or vice versa. And in some places,* ETV *is unheard of or regarded vaguely as an isolated experiment; invariably, these are places where* ETV *hardly exists —like New York and Los Angeles.*

Already a major new cultural asset in the United States, ETV *owes*

6:30 a.m. With his first morning cup of coffee still steaming, Ralph Bogertman sits in his living room watching a television lecture on Faraday's laws and the chemical changes produced at the electrodes of a cell. This is Number 121 in a 160-lesson course, "Modern Chemistry," televised throughout the United States on "Continental Classroom" over the National Broadcasting Company network. Bogertman is a Ridgewood, N. J., high-school science teacher. He is taking the course for credit toward a master's degree at Montclair State College. On Saturday he will go to the campus for a discussion period and laboratory work. He is one of 3,000 teachers taking the course toward advanced degrees in education. The aim: to improve the quality of science teaching in high schools. The way: to give teachers, and college students about to become teachers, an up-to-date chemistry course taught by a leading chemistry professor. That is Dr. John F. Baxter. A few hours after Lesson 121 goes off the air, Professor Baxter is in a New York television studio recording Lesson 130 for telecasting two weeks hence.

3 p.m. In a darkened projection room in Chicago, education officials and television specialists view recorded television lessons. They are nearing the end of a talent search for teachers in the Midwest Airborne Television Instruction experiment.

At an aircraft plant in Burbank, California, meanwhile, Grove Webster, of the project's engineering staff, arranges for delivery of one of two four-engine aircraft that will be used in the experiment. Beginning early in 1961, the plane will beam tape-recorded television courses to hundreds of thousands of students in a 400-mile-wide circle including parts of Illinois, Indiana, Kentucky, Michigan, Ohio, and Wisconsin.

8 a.m. In classrooms and dormitories on the sprawling University of Illinois campus at Urbana, students watch Dr. Robert W. Janes, a sociology professor, discuss *The Lonely Crowd,* classic study of the American character by David Reisman. Three hundred and eighty students,

freshmen mostly, are enrolled in Dr. Janes' course, "Community and Society." His twice-a-week television lectures are supplemented by classroom discussion periods on two other days. This morning he shows symbols for some of the main terms in *The Lonely Crowd*—for "inner-directed man," a gyroscope; for "tradition-directed," ritual masks; and for "other-directed," a radar screen. "Television helps deal with such abstract concepts," he says. "The moment a student questions the use of a particular visual symbol, a searching exploration of the meaning of the concept is under way."

11:15 a.m. Snipping construction paper and twisting pipe cleaners, Mrs. Ruth Abbott fashions tulips and jonquils. About 1,500 Oklahoma third-grade school children are watching her televised art course. After Mrs. Abbott's fifteen-minute lesson on paper sculpture, children in 170 classrooms throughout the state will go to work. Homeroom teachers, equipped with a work sheet prepared for the course, supervise the classes. Before art lessons were televised, most art instruction in the state lacked the ingenuity and experience that comes only from teachers (like Mrs. Abbott) specialized in art education. Oklahoma City had only three art teachers to cover eighty elementary schools.

much of its existence to the interest of the Ford Foundation but rests on a broad base of popular support —community groups, school systems, universities, and individuals.

The novelty of television is long past, and ETV, *approaching the close of its first decade, is no longer supported for its good intentions and "potential" but for what it actually brings to the screen.*

This report sketches the enterprise in broad strokes. It introduces some people who work behind the screen. It touches on the Ford Foundation's role because that is as old and broad as* ETV *itself. And it is largely pictorial; as a latter-day Alice in Wonderland might say, "What is a book about educational television without pictures?"*

**There is an extensive literature on the history of ETV and such technical aspects as financing station activation and educational effectiveness. A selected bibliography of ETV material published by the Ford Foundation and related organizations is on page 66.*

4 p.m. The offices of the National Educational Television and Radio Center (NET) overlook Central Park in New York. But Bill Accles, a film expert, sits in a windowless room, checking a tape recording of "Hats in the Ring," a series on the 1960 Presidential election, against requirements set by the NET engineering staff. Down the hall, Robert Hudson, a NET vice president, discusses television exchange arrangements with a representative of the British Broadcasting Corporation. Another official, James Roberston, works out details for a Chicago meeting of managers of NET's fifty-three affiliated ETV stations. And in the office of Nazaret Cherkezian, a new issue of *Inside Channels*, newsletter for the stations, is readied for the mail.

Majority Voice No Objection to
Catholic Nominee for President

HATS
IN THE
RING

First, the air had to be won.

In the three years after the Federal Communications Commission opened the telecast band in 1945, 108 commercial stations were authorized. Pressure and competition for additional channels, combined with several thorny technical questions—including electronic interference between some stations already on the air—led the F.C.C. to freeze additional allocations between 1948 and 1952.

Remembering the failure to capitalize fully on radio for educational purposes, school and university officials, educational organizations, parents, and other interested citizens banded together to make the case for ETV *to Congress, the F.C.C., and the public.*

In 1952, the F.C.C. reserved part of the new medium for education. The groups that were instrumental

▲ ETV stations on air—1954

● ETV stations added—1955

■ ETV stations added—1956 through March, 1961

We conclude that the record shows the desire and ability of education to make a substantial contribution to the use of television.... The public interest will clearly be served if stations are used to contribute significantly to the educational process of the nation....(From the Sixth Report and Order, Federal Communications Commission, April 11, 1952.)

This Magna Carta of educational television reserved 242 channels (since increased to 267) for the exclusive use of noncommercial, educational stations. It did in the broadcast spectrum what the Morrill Act had accomplished a century before over millions of acres: set aside part of the public domain for educational use.

Education made its case with facts as well as good intentions. Example: this photograph. No one had really added up the score on whether commercial television was serving the public interest with educational and cultural programming. So the National Association of Educational Broadcasters (with assistance from the Foundation) sat batteries of trained researchers in front of television sets in Chicago, Los Angeles, and New York. Hour after hour, day after day, they watched every channel. They added up the time devoted to entertainment, crime and violence, advertisements, education, and culture. The studies buttressed testimony favoring allocation of part of the television band to education. Testimony came from seventy-one witnesses and from writ-

in the historic decision were organized into the Joint Committee (later Council) on Educational Television. The Committee was established with funds from the Ford Foundation.

Since then, several streams have converged into the mainstream of educational-television development:

One was the mass production of television sets and growth of the medium as a magnet for the eye and mind of the American public.

Another was awakening interest in adult education. Bursts of knowledge in science, international affairs, and other fields were making many adults painfully aware of gaps in their education.

Also, a crisis in the system of formal education had developed around the postwar population boom, exploding knowledge, rising

ten statements from 838 colleges, universities, school systems, and public-service agencies.

Winning the channels was just the beginning. To be preserved, they had to be used. Use involved the establishment and operation of a station, with these ingredients: money, program content, and community support. The Joint Council gave legal counsel and engineering advice to agencies and communities working to activate educational channels. Then, as now, lawyers for the Council entered briefs in F.C.C. proceedings affecting ETV, including defense against efforts to change educational channel allocations to commercial use.

The first ETV station, KUHT, Houston, Texas, went on the air May 12, 1953. In 1954, eight new stations were born; in 1955, eight more. Today, there are fifty-four.

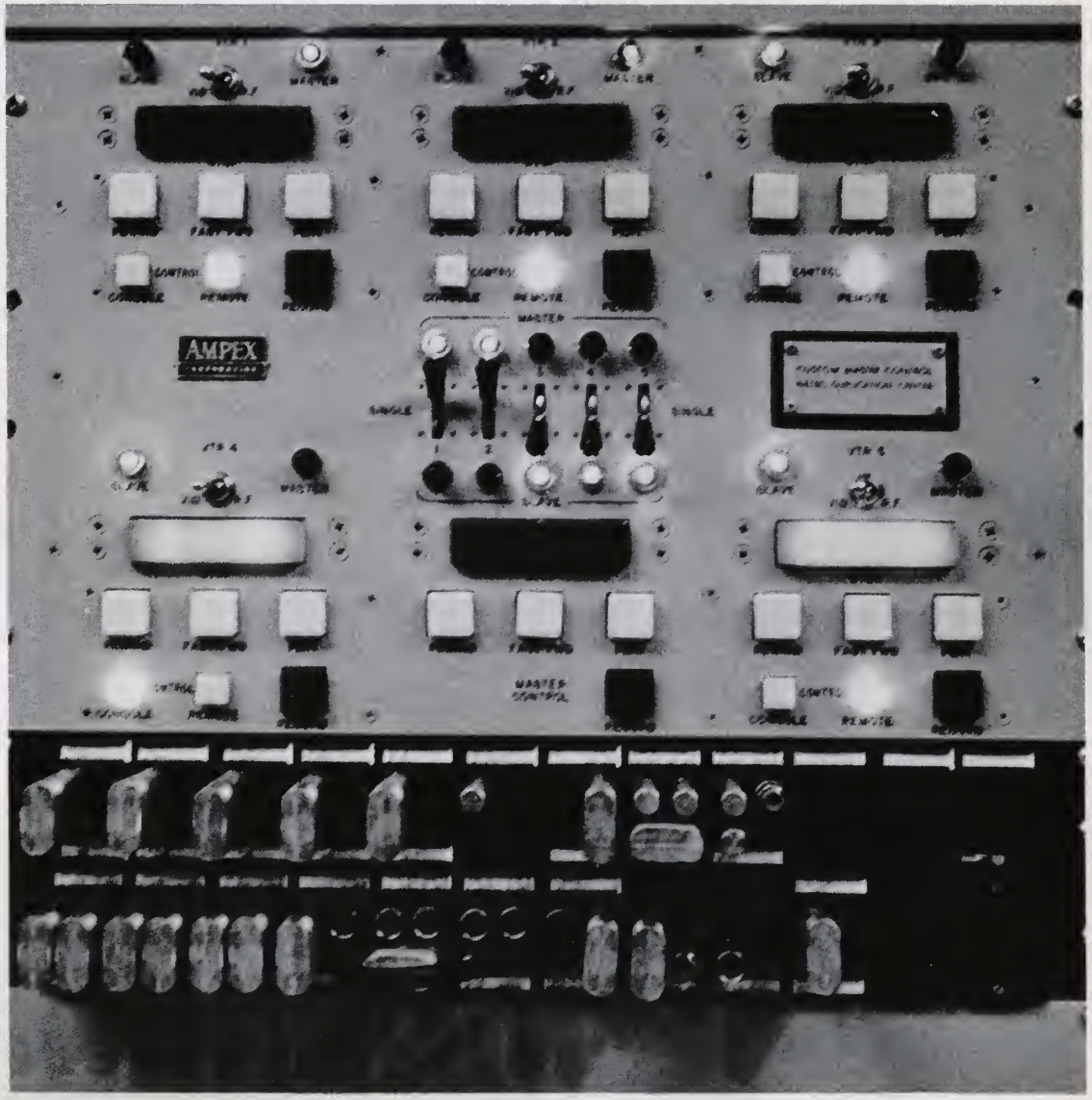
Like its commercial counterpart, ETV needs the costly hardware of modern electronic communication: transmitters, towers and antennas, studios, video recorders, cameras, lights. The Ford Foundation, through grants from the Fund for Adult Education, gave thirty-three of the first ETV stations $4.5 million for construction expenses. The grants in many cases meant the difference between whether a station would come to life or not. The sum has since been matched several times over by contributions from universities, school systems, foundations, state systems of higher education, community groups, corporate and private gifts, and public fund drives.

enrollments, and shortages of classrooms and teachers.

Finally, the Ford Foundation had reconstituted itself as a national philanthropy. Education was one of the main concerns of its new program. It established the Fund for Adult Education to develop ways of bringing new knowledge and culture to men and women who would never again sit inside a classroom. By establishing the Fund for the Advancement of Education, and by programs of its own, the Foundation sought not only to help meet the educational crisis but to turn it into an opportunity for improvements in the quality of education.

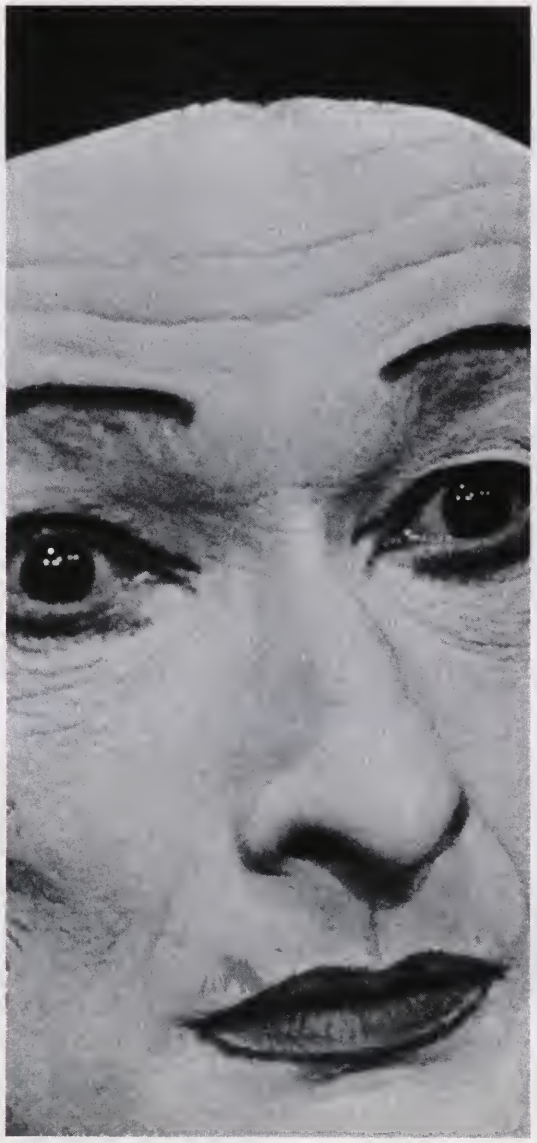
ETV *activities of the Funds have since been brought into the program of the Ford Foundation, which altogether has provided $50 million for educational television.*

The Foundation's involvement



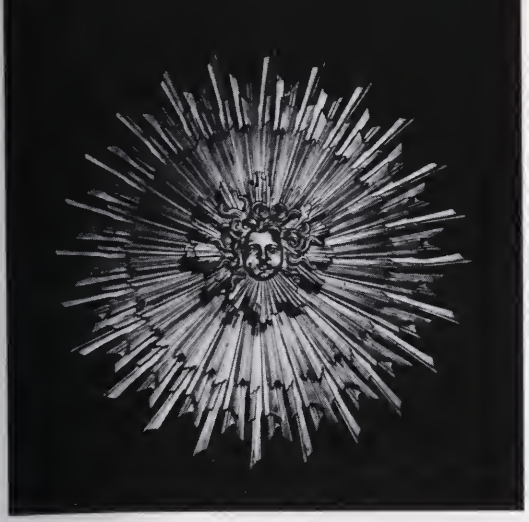
KQED

in the destiny of ETV *illustrates the role of private philanthropy in American society. The Foundation invested heavily in educational television for its potential in helping to meet a national need. A philanthropic foundation has the freedom — and responsibility — to attack problems that seem important even if they have not been explored. It can take a chance in matters important to the well-being of society where others cannot or will not venture. And by its example, it can encourage the interest, ideas, and efforts of others.*



Before ETV stations took to the air, a nucleus of the ETV movement operated over commercial television facilities. While it was helping build ETV, the Ford Foundation began "Omnibus," an experiment to determine whether high-caliber adult, cultural television could compete for a large and loyal audience on a commercial-television network. "Omnibus" ninety-minute weekly telecasts began in November, 1952. It pioneered in history, music, biography, and drama. It won forty-eight major awards and an average audience of twenty million viewers for each program. The Foundation gave "Omnibus" a net subsidy of $3.1 million. By 1957, the Foundation concluded that the experiment had demonstrated the wide acceptability of "Omnibus." The subsidy ended, and "Omnibus" has continued on commercial networks under other auspices.

To sustain community support, ETV stations had to have enough good program material to remain on the air more than two or three hours a day, five days a week. Embryonic stations could not afford extensive live programming. ETV dipped into millions of feet of "educational film" and found it dated or generally unsuitable for aesthetic, legal, and technical reasons. To meet the after-school programming needs of ETV stations, the Educational Television and Radio Center was established in 1953 and has since been supported by the Ford Foundation. It is viewed through The Learning Lens : III.



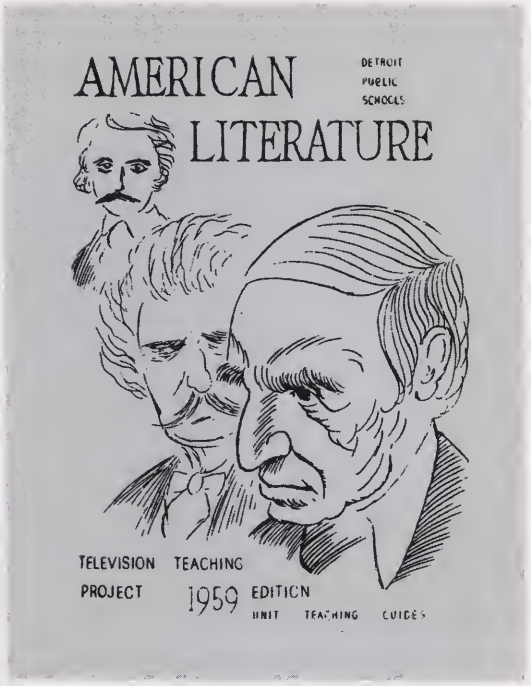
ETV is growing so rapidly that a statistical anatomy of the field can only be approximate. As of the beginning of the 1960-61 academic year:

—At least three million students in about 7,500 elementary and secondary schools were receiving part of their regular daily instruction by television.

—Perhaps as many additional students were receiving televised "enrichment" programs, material not counted as academic credit but considered by educators a valuable supplement to the curriculum.

—About 250 colleges and universities were giving credit courses on television to about 250,000 students.

—About 8,000 college students preparing for teaching careers and high-school teachers working for advanced degrees in education were or had been enrolled through

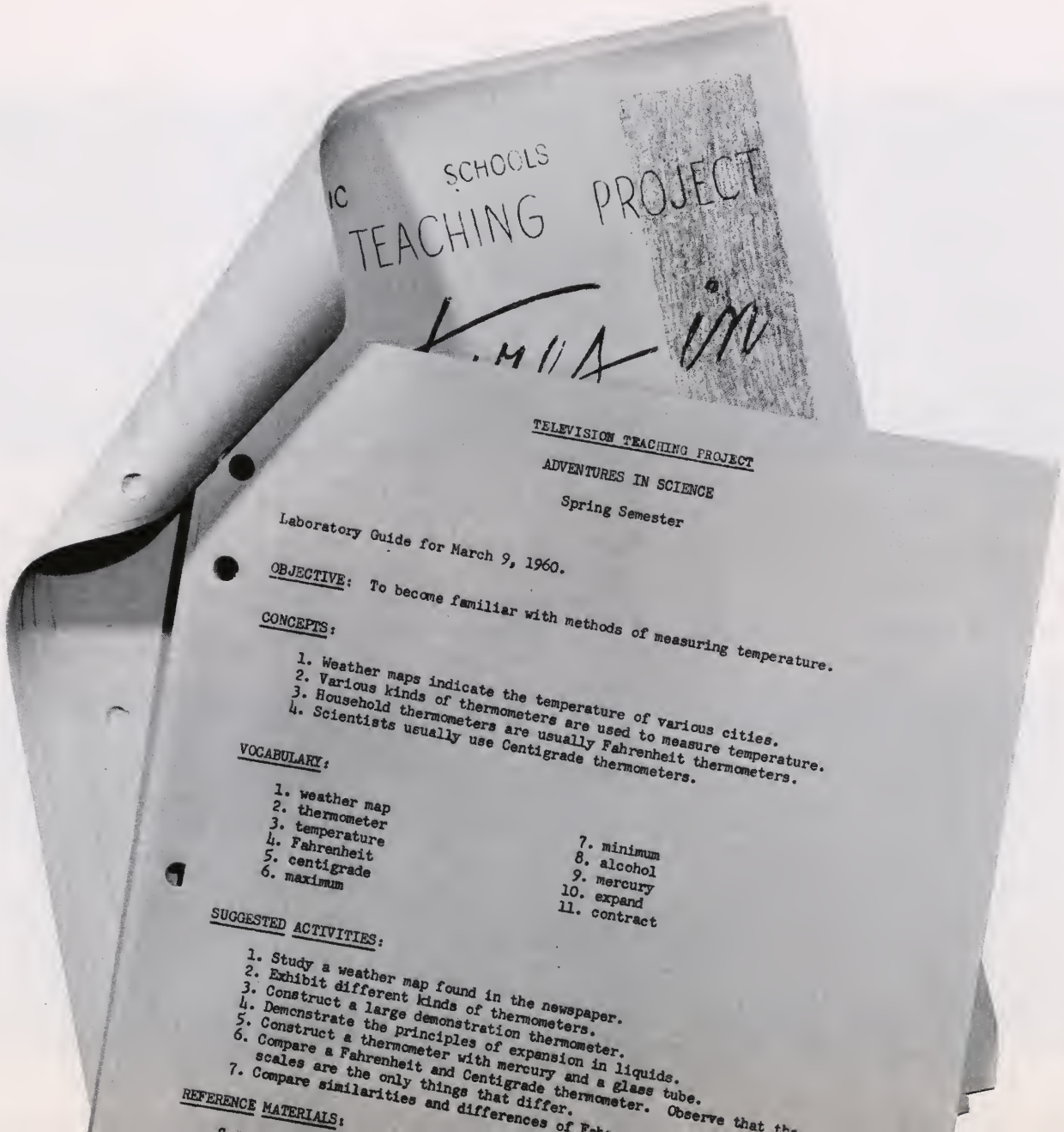


These are mimeographed study guides for courses taught by television in the Detroit public schools. They tell classroom teachers in advance that on March 10, the television teacher in ninth-grade World History will discuss the Thirty Years' War. . . . The guide to an eighth-grade science lesson on chemical changes suggests that teachers ask their classes to read about Priestly, Lavoisier, and Dalton and to identify the black material in a burnt pie crust. . . . The guide for third-grade French lists in the new vocabulary for Unit 6, "The Market," the French for words like "basket," "salesman," and "I buy."

Detroit began telecasting courses in 1955. In 1957, it joined the National Program in the Use of Television in the Public Schools, supported by the Ford Foundation and the Fund for the Advancement of Education. It is fairly typical of school systems using television for direct teaching for credit: ETV neither blankets the school system nor is it a token activity. Ninety-six of Detroit's 280 schools use one or more TV courses.

The ETV budget for the Detroit schools is about $200,000 a year out of a total school budget of $125 million. ETV is conducted by twenty-three on-camera teachers and twenty-four production, evaluation, and supervisory personnel. No student receives more than thirty minutes of televised instruction a day. In the ten to twenty-five minutes before or after the televised lesson, classroom teachers further explain the lessons, handle pupils' questions, review and test, and present new material. On-camera teachers spend the full week preparing for and delivering a single televised course. They meet with classroom teachers in four-week summer workshops and monthly during the school year to plan the course and review the effectiveness and shortcomings of the televised presentations.

The televised classes are larger than normal, averaging 150 pupils. As few as two classroom teachers can conduct such classes. Students are tested, before and after television courses, in intelligence, achievement in subject matter, and listening skill Their performance is compared with that of "con-



TELEVISION TEACHING PROJECT

ADVENTURES IN SCIENCE

Spring Semester

Laboratory Guide for March 9, 1960.

OBJECTIVE: To become familiar with methods of measuring temperature.

CONCEPTS:

1. Weather maps indicate the temperature of various cities.
2. Various kinds of thermometers are used to measure temperature.
3. Household thermometers are usually Fahrenheit thermometers.
4. Scientists usually use Centigrade thermometers.

VOCABULARY:

1. weather map
2. thermometer
3. temperature
4. Fahrenheit
5. centigrade
6. maximum
7. minimum
8. alcohol
9. mercury
10. expand
11. contract

SUGGESTED ACTIVITIES:

1. Study a weather map found in the newspaper.
2. Exhibit different kinds of thermometers.
3. Construct a large demonstration thermometer.
4. Demonstrate the principles of expansion in liquids.
5. Construct a thermometer with mercury and a glass tube.
6. Compare a Fahrenheit and Centigrade thermometer. Observe that the scales are the only things that differ.
7. Compare similarities and differences of Fah

REFERENCE MATERIALS:

300 colleges and universities in physics, chemistry, and mathematics courses taught over "Continental Classroom." Telecast over a national commercial network, the courses are watched by an additional 400,000 viewers not enrolled for credit.

—Fifty-four ETV *stations were on the air and ten more were preparing to go into operation before 1962. The signals from these stations cover an area populated by seventy million persons, of whom an estimated twenty million are regular* ETV *viewers.*

—The National Educational Television and Radio Center, with whom the ETV *stations are affiliated, was operating as a kind of "fourth network," exchanging recorded programs among its affiliates by mail or other non-electronic means of delivery.*

trol" classes taught without television. Detroit results, reported by Dr. Elmer F. Pflieger, coordinator of the project, confirm what is by now an old story in testing the effectiveness of teaching by television: It is as good as or better than conventional teaching.

NET, the National Educational Television and Radio Center, is headquarters and chief national spokesman for the fifty affiliated educational television stations, and the main stimulus and exchange medium for noninstructional programs. NET helps affiliates keep abreast of developments in ETV. Visits by station-relations staff, meetings of all station managers and program managers, and a monthly newsletter help stations compare notes on fund-raising, promotion, and public relations. One objective: to increase the audience for programs distributed by NET. Another: feedback to NET of audience reaction to programs that have been televised nationally.

The core of NET's operations is the program service. The Center provides each station eight hours a week of programs: six hours of new material and two drawn from NET's growing backlog of programs—about 1,900 hours at last count. Most programs come from the stations themselves. A program idea from a station is accepted by the Center for national exchange on the basis of its quality and interest to other affiliates. The Center pays most of the costs.

Other program ideas originate at the Center and are farmed out to one of the stations for production. Still other sources of programs: the British Broadcasting Corporation, the French Television Network, and occasional outstanding commercial-television shows of educational value. Conversely, some commercial television stations have purchased NET programs, especially for showing in cities without ETV channels.

NET claims the title of "fourth network." The evidence: quality, educational content, flexibility, and visibility of its program service. "It's not blind reverence for the educational label that leads people to watch NET programs," says an official. "We're competing for their attention with quality. We consider dullness a criminal offense. We try to make our programs interesting without sugar-coating and without watering down the validity of the educational material."

Visibility: ETV stations make such programming available not just occasionally, or on a Sunday afternoon, but every evening, in the prime viewing hours between dinner and bedtime.

Flexibility: If a program is of unusual interest, many ETV stations telecast it twice the same day or several times a week.

Content: NET's programming covers six basic areas: public affairs, children's programs, science, the social sciences, humanities, and the arts. Here is a small sampling:

Public Affairs—"Prospects of Mankind," the series moderated by Mrs. Eleanor Roosevelt and

Prospects of Mankind

WGBH—Boston

What's New

WHYY—Philadelphia

—State and regional networks were developing, both for instructional television and adult programs. Networks linked by coaxial or microwave transmission or by videotape exchange are in operation in Alabama, Oregon, North Carolina, Florida, and part of New England. Others are being organized with assistance of grants from the Foundation among colleges and universities in Michigan, thirteen Western states, six states in the Upper Midwest, and central Texas.

—The Midwest Program on Airborne Television Instruction was preparing to telecast courses six hours a day, four days a week from an airplane flying over Indiana. Beginning in September, 1961, the telecasts will cover an area including 13,000 schools and colleges enrolling five million students.

For ETV, *the prize is quality, not*

featuring French statesman Jules Moch; V. K. Krishna Menon, Defense Minister of India; Adlai Stevenson; Governor Nelson Rockefeller, and others. . . . "Challenge of Foreign Policy," experts from government, journalism, and academic research centers in a series on key decisions in international affairs.

Children's Programs—The "Children's Corner" series, a whimsical world of imaginary friends like Daniel S. Tiger, who lives in a clock; Grandpère, who speaks only French; and the dignified King Clock, who is in charge of all dates. . . . "Discovery," in which Mary Lela Grimes, former staff member of the Massachusetts Audubon Society, provides the scientific background for youngsters to explore such topics as "The Edge of the Sea," "Life's Building Blocks: Cells," and "Before Backbones: Early Invertebrates." . . . "What's New," an experimental series in which leading child psychologists and educators have collaborated with television specialists, is composed of fifteen-minute programs covering topics like animals, science, drama, health, sports, and the home. The series runs five days a week for thirteen weeks.

Science and Medicine—"Frontier to Space," developed by the Physical Science Laboratory of New Mexico College of Agriculture and Mechanic Arts. . . . "The Elements," a series conducted by the Nobel prize-winning chemist, Dr. Glenn T. Seaborg. . . . "The Nature of Viruses," an eight-part series conducted by another Nobel laureate, Dr. Wendell M. Stanley of the University of California.

Social Sciences—"The Measure of Man," lectures probing such human ideals as loyalty and dignity and including readings ranging from Euripides to Thurber. . . . "45 Years with Fitzpatrick," a series with the St. Louis *Post-Dispatch's* dean of American political cartoonists. . . . "Our Nation's Roots," a series produced by New York University on immigrants and their contributions to the United States. . . . "The Great Plains Trilogy," a University of Nebraska production dealing with geology, the Plains Indians, and the westward movement. . . . "Religions of Man," a survey of the great living religions, their founders, teachings, and meaning.

Humanities and the Arts—"Language in Action," a series on semantics, by Dr. S. L. Hayakawa. . . . "American Perspective," nineteen programs on Americans' and Europeans' attitudes toward one

The Great Plains Trilogy

KUON—University of Nebraska

Discovery

WGBH—Boston

the size of the audience. Even where in-school television is most developed, no student receives more than an hour and a half a day of televised instruction. Less than ten per cent of the forty-five million school and college students in the United States take courses by educational television. ETV *cultural programs, free of mass-audience compulsion toward a lowest common denominator, seldom command the audiences of commercial-network "spectaculars." Still, millions of American men, women, and children regularly view* ETV, *and the chances are that* ETV *will at least double its audience in the decade to come.*

another viewed through ideas in books. . . . "The Arts Around Us," thirteen programs on the techniques and principles of painting, using original works from museums and private galleries. . . . Presentations of such groups as the Fine Arts Quartet, the Boston Symphony Orchestra, and the Martha Graham Dance Company.

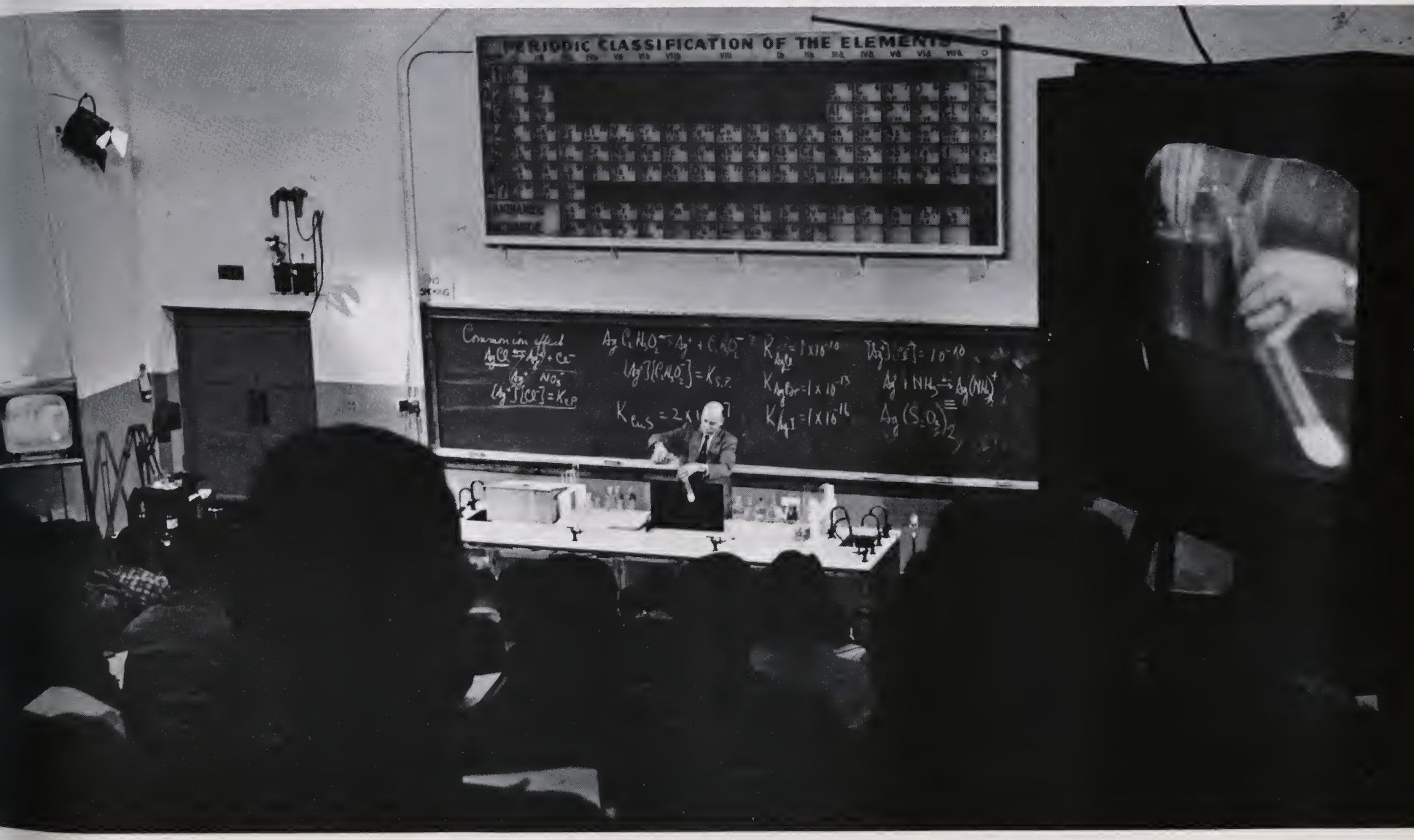
Since the NET Center was established in 1953, it has been supported by Ford Foundation funds totaling $21.2 million. The last general-support grant was made in 1959 for a five-year period, during which the Center hopes to develop major financial support from other sources—philanthropic and other nonprofit institutions, private corporations, and individuals.

In the spring of 1955, when Pennsylvania State University began instruction by television, resident enrollment was just short of 12,000. By the start of the 1960-61 academic year it had climbed to over 14,500, and ETV had so proved itself as a means of coping with the increasing number of college students (while maintaining quality of instruction) that it was accepted as a continuing part of the University's instructional program. The ETV project started with grants from the Fund for the Advancement of Education and is now supported entirely by the University.

It grew to the point where 5,800 student credit hours were being taught in eleven courses given for full academic credit. Penn State's is the most extensive college-level ETV system and the most heavily researched. At one time, five psychologists and educational researchers were devoting full time to acquiring objective, statistical knowledge of ETV in four general areas: effectiveness compared to conventional teaching, appropriateness, acceptability, and feasibility. Within these areas, hundreds of detailed points were explored. Tests not only calculated retention of facts taught by television but also assessed students' ability to apply principles to the solution of problems and to interpret data and draw valid conclusions. Researchers also compiled data on ETV's effect on the attitudes and value judgments of students, the cost of televised versus regular instruction, and faculty preference between teaching by television and teaching to overcrowded classes face to face.

By the fall of 1959, Dr. C. R. Carpenter, director of academic research at Penn State, stood before a national research symposium and, in effect, pleaded for a halt to certain frequently traveled avenues of research on educational television.

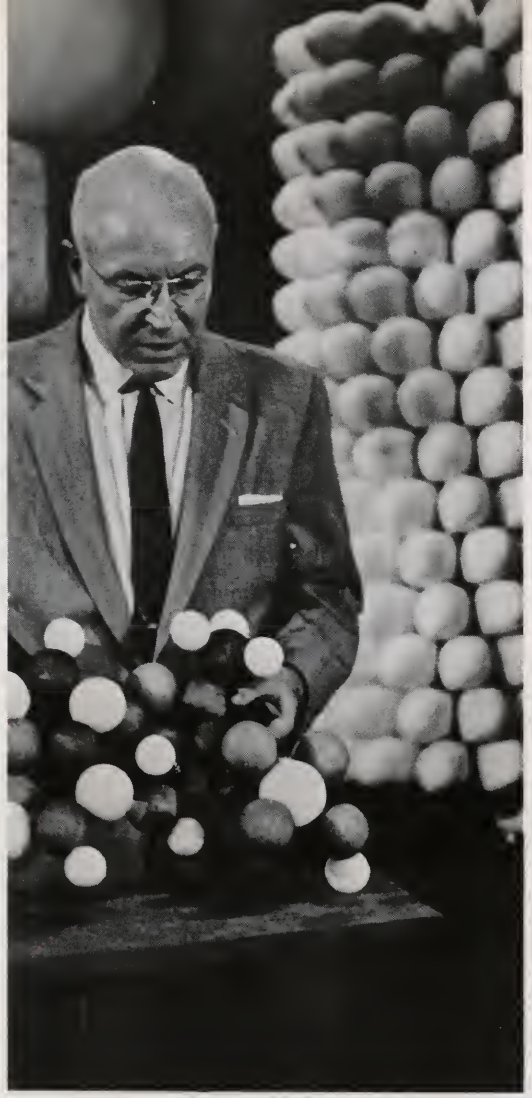
"We do not need more demonstrations that conventional x, y, and z courses can be taught by television," he said. "Comparisons of results of teaching courses conventionally with teaching the same courses . . . by television is a type of research which has run its course. There have been enough demonstrations that television can be useful in many supplementary ways in an extensive school system, city, or region." Instead, he suggested basic ETV research on the learning process, motivation, criteria for selecting television teachers, and combination of ETV with other media.


PERIODIC CLASSIFICATION OF THE ELEMENTS

The physical nature of the medium —visibility, movement, and immediacy—places unusual emphasis on the things that are shown as well as on the people who organize and transmit ETV.

The screen is better than a front row seat for viewing the details of an experiment, a musical instrument, a painting, the lips of a teacher forming the sounds of a foreign language.

The "trademarks" of notable cultural and educational programs outside instructional television include the archaeological rarities on "Yesterday's Worlds"; the huge blowup of a musical score used as a floor on Leonard Bernstein's "Omnibus" program on Beethoven's Fifth Symphony; the puppets on "The Friendly Giant," the children's series conducted by Robert Homme of the University of Wis-

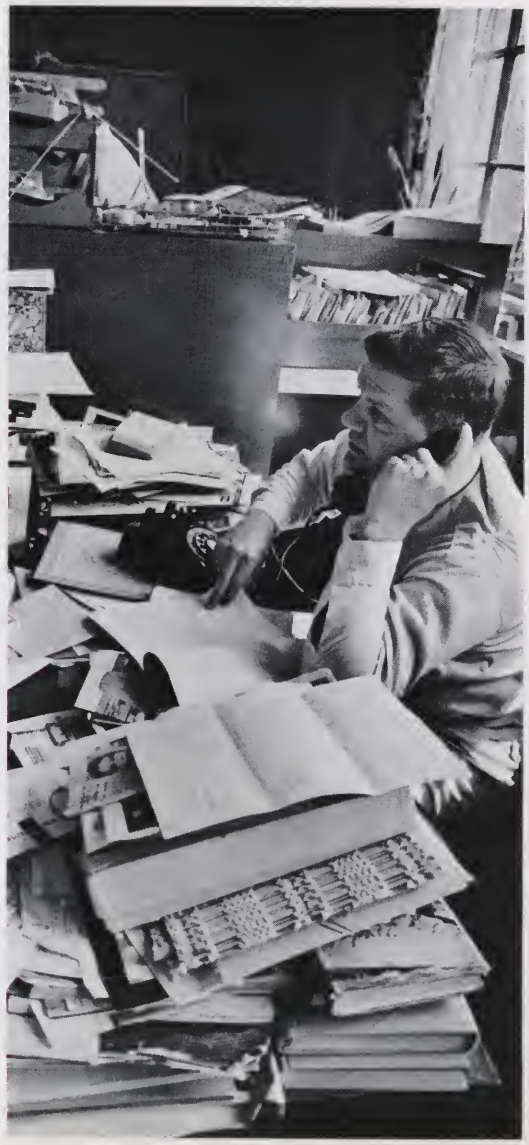


Violin I.
Viola.

consin School of Music; Dr. Edward Teller's model of molecular structure; and the dramatic electron microscope views of living cells on "Patterns of Life."

In instructional television, objects and special effects produce a marked contrast with conventional classroom settings. ETV *overcomes the time and cost limitations of bringing a thousand and one artifacts, special maps, original documents, photographs, sketches, and equipment into the classroom. Educational materials from museums, libraries, historical societies, industrial plants, government agencies, and attics and basements are placed before the cameras. Some "objects"—like a local water-purification plant or the countryside of a foreign country—must be visited by the camera.*

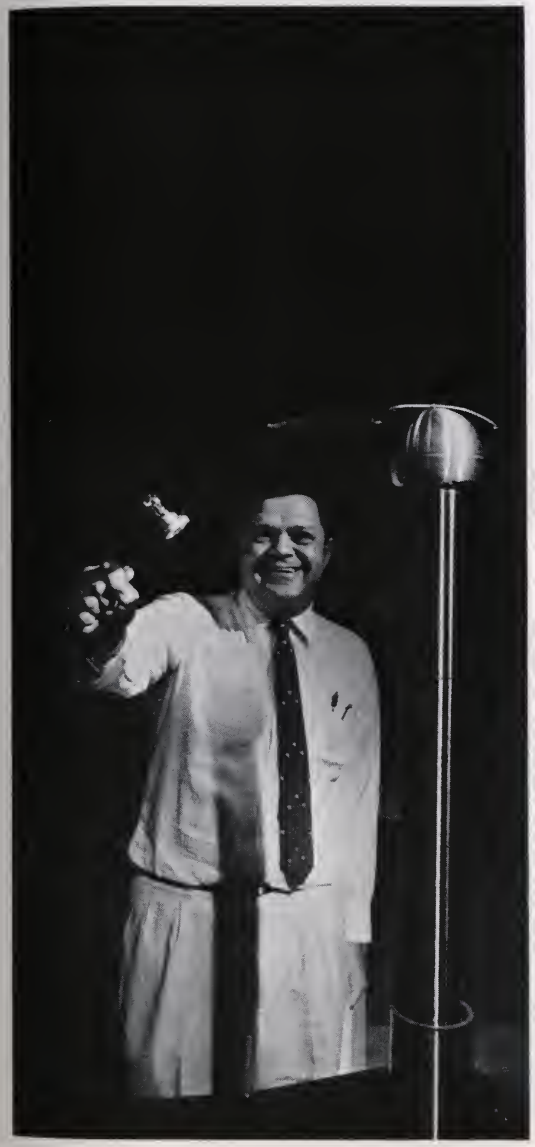
The television camera masks out

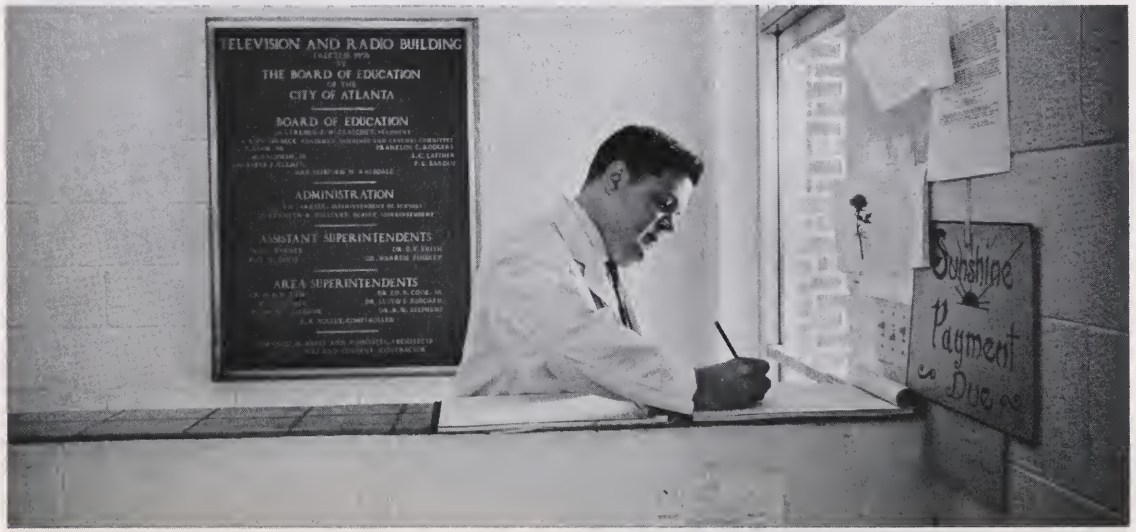


"It's easy for pupils to turn a classroom into a side show," says Paul Guptill. He is recalling his days as a teacher in Atlanta. "Many kids just wait for any opportunity to alter the mood of a serious lesson. I had to be careful about bringing demonstration objects into the classroom. The more common the object—an egg, let's say—the more it seemed to arouse giggling and wisecracks. There's nothing wrong with humor in the classroom, but when it gets out of hand, it's at the expense of learning."

Now a television teacher, Guptill can drive a small car into Atlanta's educational-television studio for a junior-high-school science lesson on the conversion of fuel to power. "It takes time to position the car and adjust the lighting so that the camera can move around under the hood to show the various parts," he points out, "but none of this time is wasted in the ten classrooms receiving the lesson. By classtime, everything is set up. I use the car as effortlessly as I would a test tube."

Jim Barfield, a colleague of Guptill who teaches health on television, almost seems to be present in the twenty-two classrooms his course reaches. In a lesson on the blood and circulatory system one day, Barfield pricked his finger under the closeup lens of the camera. Several students gasped. The next moment the screen showed a photomicrograph of blood cells magnified thousands of times. Though physically removed from the classrooms, Barfield sensed the reaction of some of the students. "Now don't any of you




TELEVISION AND RADIO BUILDING
THE BOARD OF EDUCATION
OF THE
CITY OF ATLANTA
BOARD OF EDUCATION
ADMINISTRATION
ASSISTANT SUPERINTENDENTS
AREA SUPERINTENDENTS
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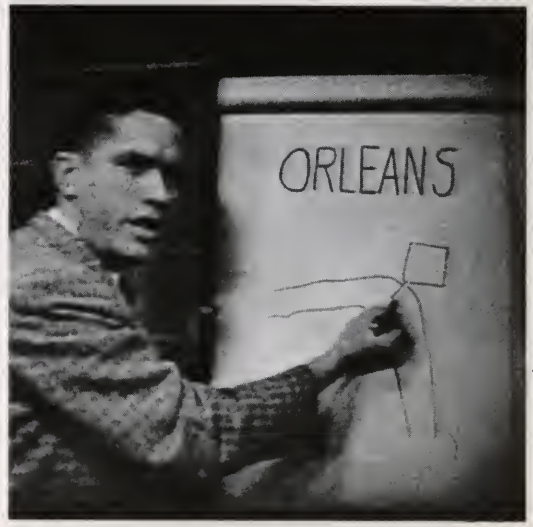
distractions and fixes attention on the object under discussion. Using scale models, ETV *alters space as well as time. Simple painted backdrops or sets and occasional music enhance the televised communication of certain programs and lessons.*

Showmanship, while never an end in ETV, *is often an adjunct to the teaching process. The technical preparation necessary to create vivid impressions during a televised lesson would be economically impossible in the ordinary classroom. Even if cost were not a factor, conventional teaching schedules would not give teachers time for research and for consultations with technical personnel.*

worry," he said. "This will clot in a few seconds. I'm not going to draw too much blood, because while I'll bleed for you, I won't die for you." Television has greatly expanded the kind of teaching resources Barfield is able to draw on. In a lesson on the muscular system, he brings an archery champion before the cameras. To demonstrate dental hygiene, he has a dentist come in and brush his teeth in plain view of thousands of students. Another lesson consisted of a noted surgeon and a full complement of nurses and assistants re-enacting an appendectomy.

The hands of Myles Platt became as familiar to Detroit high-school students as did the hands of Frank Costello to millions of Americans during nationally televised crime hearings eleven years ago. One of Platt's notable lessons concerned the struggle among England, France, and the Holy Roman Empire in the sixteenth century. The camera showed only his hands against a map. The hands moved blocks marked for Henry VIII, Francis I, and Charles V as Platt discussed the balance of power. He has also used this technique in describing the role of Joan of Arc in the Battle of Orleans.

But ingenious effects and objects are only one aspect of the drama unfolding in education through the use of television. Platt's case, for example, illustrates ETV's ability to extend to many more students teaching that is good to begin with. A veteran of nine years' teaching at all levels from the third to the twelfth grades, he is completing



his Ph.D. in political science at the University of Michigan. He also teaches at Wayne University in the evening. Officials call him one of the ablest teachers in the school system.

ETV has also opened new paths of professional consciousness for teachers. "Conversation about teaching techniques used to be almost taboo among teachers," Platt says. "If someone asked about the way you brought across a certain point in your class, it was a tacit admission of ignorance. Now ETV has made teaching a team responsibility, among the teacher on camera, his counterparts in the classrooms, and their supervisors." ETV does not subordinate the role of the classroom teacher; quite the opposite. Platt, who returned to classroom teaching for two years and then, in 1960, became a teacher in the Midwest Program on Airborne Television, knows ETV from both sides of the screen. "I spent more time preparing for the few minutes left to me as a classroom teacher during a television class than I would for the forty-five minutes of a non-television class. The better the television lesson, the more the classroom teacher must be on his toes. He spoon-feeds less. The televised portion of the lesson forces him to stimulate student questions and provoke reading and discussion. It is pegged to a norm, and the classroom teacher is challenged to identify and help students who are behind or ahead of the norm. ETV lets you do this without holding up the rest of the class."

One-fourth of the nation—some forty-five million youngsters and adults—are engaged in some program of formal education. Teeming with problems, American education is in a ferment of analysis, experimentation, and innovation. ETV *is a versatile instrument for grappling with major problems:*

The shortage of teachers — *It could be met either by a mass movement to the teaching profession by the best college graduates or by relaxation of standards to permit less-able men and women to teach. The first way is virtually impossible, the second is undesirable. Another way is to make better use of good teachers. Efforts are being made to relieve teachers of non-teaching chores by use of instructional secretaries and other non-professional assistants. Teachers can function in teams to reach*

Dr. Lester Beck, an experimental psychologist at Portland State College and a veteran of twenty-six years' teaching, was curious about the relation between a student's ability and his reaction to ETV. Since enrollment in the televised section of Beck's general psychology course is voluntary, one measure was the percentage of students re-enrolling in the televised section after the first semester. Beck found that the higher the student's grade, the more likely he was to re-enroll in the televised section—92 per cent in the case of "A" students; "B" students, 82; "C," 58; "D," 20; and "F," 17 per cent.

About 300 colleges and universities now give credit for televised courses. This represents only 15 per cent of the country's institutions of higher learning. But the number a year ago was 186, and two years ago, only eighty-seven.

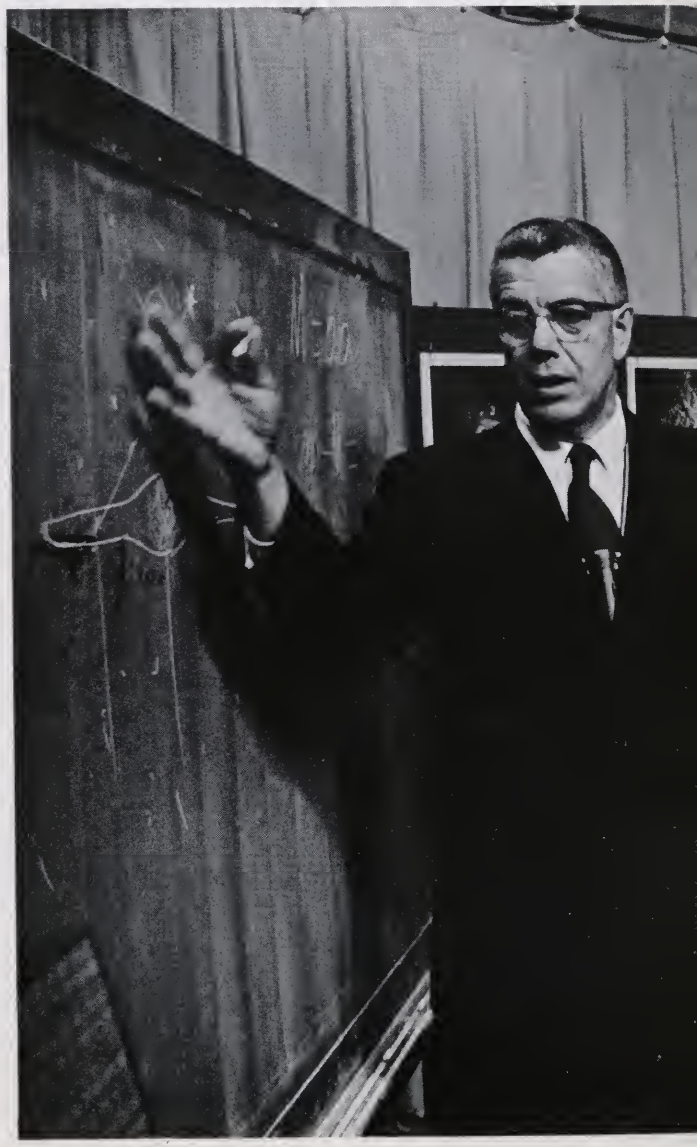
If televised teaching is a revolution in many school systems, on college campuses it is taking root as a matter of evolution. Many college teachers greeted ETV with skepticism or open hostility. According to Professor Glenn Starlin, director of Oregon's interinstitutional ETV project, the chilly reaction is thawing.

ETV is particularly useful in handling the large number of students enrolled in general courses for freshmen and sophomores. On many campuses, conventionally taught lecture sections of 150 students or more are not uncommon. Many students, at a time when their habits and attitudes toward higher education are forming, are left to the care of less-experienced younger faculty members and graduate assistants. ETV enables more-experienced professors to reach these large undergraduate classes, and in experiment after experiment students prefer televised teaching by seasoned teachers to face-to-face teaching by less-experienced teachers.

In the colleges as in the schools, moreover, there are some fields with no teachers or just a handful. Professor E. G. Ebbighausen, for example, is the only professional astronomer in the state of Oregon. "I first turned down an offer to teach on television," he recalls. "I'm an informal lecturer. I thought, how do I interact with this inanimate camera? It doesn't laugh, it doesn't grin, it doesn't look sour when a student misses the point. Well, I must say that I am enjoying myself, partly because I'm teaching students on campuses that simply never had astronomy before." Ebbighausen, who teaches at the University of Oregon at Eugene, was referring to Oregon State College, at Corvallis, and the State College of Education, Monmouth. These, along with Portland State and one private college, are joined in Oregon's interinstitutional television project, in which 3,000 students have taken one or more televised courses for credit.

Here is how ETV widens the range of Lester Beck's course in general psychology: "I've had colleagues from all over the country appear; they're glad to do this for a single television lec-

KOAC-TV
Television



larger-than-usual classes, gain more time to prepare lessons, and work with individual students and small groups. ETV *facilitates the rescheduling and variations in class size such arrangements require.*

The quality of teaching—*Better use of teaching talents, partly through* ETV, *frees many school and college teachers of the necessity of repeating each lesson to several class sections, gives them more time to keep up with their fields, supervise student activities, meet with supervisors, correct papers, and do other tasks for which the school day leaves little time.*

The training of teachers—*Teaching is one of the few professions whose practitioners rarely see each other's work. By permitting teachers to watch one another in action,* ETV *is a new avenue to the teacher's professional growth. Also, many*

ture, but wouldn't for nine or ten separate sections. I've shown films of Pavlov at work. We used a chimpanzee for an experiment in animal psychology, and a fire official discussed the use of lie-detection techniques in arson investigations. Once, while the course was dealing with child development and the case of Helen Keller, an eight-year-old blind and deaf girl and her teacher consented to come to the studio. The studio was a strange environment for the girl. She started walking around, touching things. The camera followed her, giving a kind of powerful immediacy to the scene that you couldn't possibly achieve in a classroom. That sequence was taped, and three years from now the girl and her teacher plan to come back. Classes then will have a chance to see how her development has progressed.

"Televised instruction shifts more responsibility to the student for learning, instead of his being spoon-fed. And ETV is not starkly impersonal. In a way, it goes beyond face-to-face contact because it is literally eye to eye. Students have occasional personal conferences, considerable correspondence, and frequent telephone talks with me. Some of our televised courses have arrangements for discussions with proctors in the classroom. Too many questions in the so-called stimulating interchange in the classroom are simply clarification of small points. Questions by television students tend to be more fundamental, indicating that they are clearing up points of fact themselves and going beyond to the difficult job of problem solving, reasoning, and analysis."

school systems are televising in-service training for teachers.

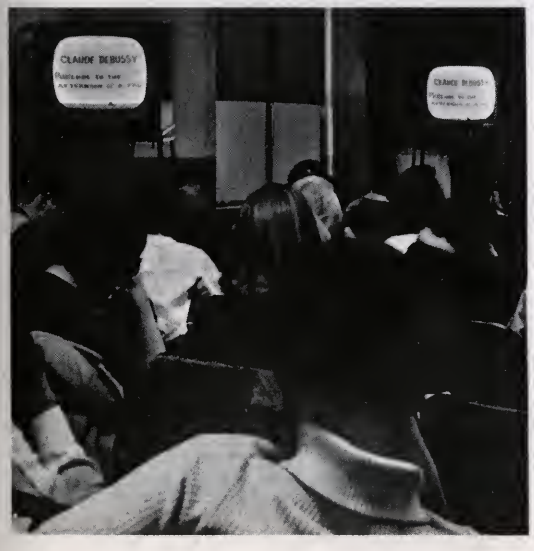
Geographical imbalances—*More than 25,000 of the 125,000 public schools in the United States are still one-teacher schools. One of every six high schools has less than 100 students. Even the best teachers in these schools cannot teach all subjects well; often some subjects are not taught at all. Reaching into the most isolated school,* ETV *insures that thousands of students are not deprived of essential subjects.*

The explosion of knowledge—*By increasing the time available to teachers and college faculty members,* ETV *helps them continue the self-education that is a teacher's lifelong responsibility. Also, television lessons cover more ground and, in effect, stretch the capacity of existing courses to absorb new material. And when new curricula*

Indirectly, the Ford Foundation has provided support for college-level ETV instruction by aid to ETV stations and to state and regional networks.

Directly, the Foundation has committed about $1,850,000 for the salaries of faculty members released from regular academic duties to spend full time for the presentation of credit courses on about fifty campuses. Through these grants, moreover, first-rate faculty members can teach—through videotape recordings or through networks like Oregon's—at many colleges and universities other than their own. And through ETV, future generations of students will see such memorable courses as those now being recorded by Walter Prescott Webb, one of the great living historians, on the Great Plains and Great Frontier.

"Continental Classroom" caught the humor and human interest of the nation. Here was a serious, well-taught academic course in modern physics, telecast daily from coast to coast at the yawn-filled hour of 6:30 A.M. Parents marveled at the sudden alertness of formerly late-waking teenagers; in the first week of the course, 13,000 textbooks were sold; Catholic institutions rearranged Mass schedules to permit viewing by students and clerical teachers; a blind high-school senior listened while his mother read him the equations written on the blackboard. In all, 400,000 persons watched the course the first year it was telecast, beginning in October, 1958, over 157 stations of the National Broadcasting Company network.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call for additional apparatus, ETV *reduces the cost by making one purchase serve many classes. And* ETV *adds a new dimension to school, college, and university activities in adult education, ranging from reading and writing for illiterates to instruction for college credit.*

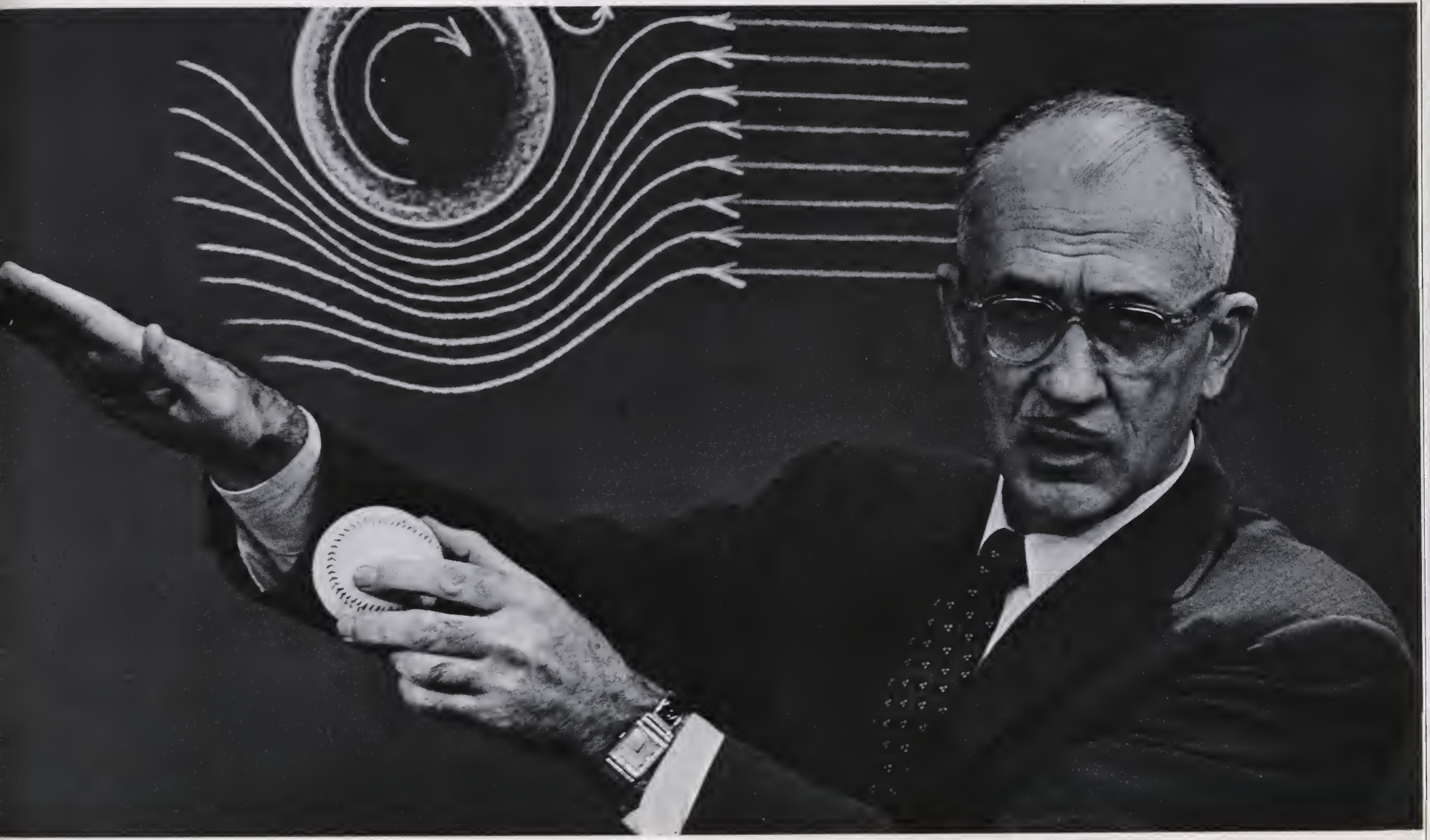
Slow and fast students—*There is increasing concern for the talent lost to society from two sources: the slow student, who with more attention and guidance might finish school and go on to some form of higher education; and the bright student chained to the average pace of his age group.* ETV*, combined with team teaching, often permits more attention to the first group. For brighter students,* ETV *provides material beyond the curriculum, offers work for advanced standing in college, and aids independent learning.*

While this ubiquitous appeal was welcome, the specific objective of the project was, and is, to raise the level of high-school teaching by exposing teachers to current developments and suggesting ways of teaching them to their classes. In physics, the problem was particularly acute: Most of the nation's physics teachers had never taken more than elementary college physics and many schools had no physics teachers at all.

"Continental Classroom" has been watched by at least half of the country's 70,000 high-school science teachers. They report—and objective studies confirm—that they are bringing new subject-matter and teaching techniques to their classrooms. In its second year, "Continental Classroom" re-ran the physics course a half-hour earlier, at 6 A.M., and in the 6:30 slot introduced a course in modern chemistry. In its third year, beginning in September, 1960, chemistry was re-run at 6 A.M. and mathematics started at 6:30. Physics was no longer telecast over the national network but was being distributed by other means.

"Continental Classroom" has involved close cooperation among schools, colleges, universities, and specialists in education and the subject fields themselves. The project, originally under the auspices of the American Association of Colleges for Teacher Education, is now administered by Learning Resources Institute. Courses were planned with the American Chemical Society, the Conference Organizations of Mathematical Sciences, and other professional groups. The teachers —Dr. Harvey White and Dr. John L. Kelley of the University of California, Berkeley; Dr. John F. Baxter of the University of Florida; and Dr. Frederick Mosteller of Harvard University—are seasoned professors. To lecture on special aspects, they have brought guest lecturers, including fourteen Nobel Prize winners, before the cameras. A special effort is made to disseminate new teaching techniques twice a week in the mathematics course by Dr. Julius H. Hlavaty, a high-school teacher, and Professor Paul C. Clifford of Montclair State College. Procedures for granting credit, examinations, supplementary discussion and laboratory work, and other details are under the control of the colleges and universities that grant credit for the courses. Between eight and ten thousand students registered for credit. These included not only teachers but college students and gifted high-school students seeking advanced standing in college. Seventy-four per cent of the students in the chemistry and physics courses passed, 5 per cent failed, and 21 per cent dropped out. Although most viewers watch "Continental Classroom" in their homes, groups also watch in dormitories, high-school and college classrooms, and engineering laboratories.

Although the Ford Foundation and the Fund for the Advancement of Education provided the largest single contribution ($612,000) toward the first-year costs of "Continental Classroom," and the Foundation made grants totaling $1 million for the second and third years, it is now supported primarily by gifts from ten corporations.



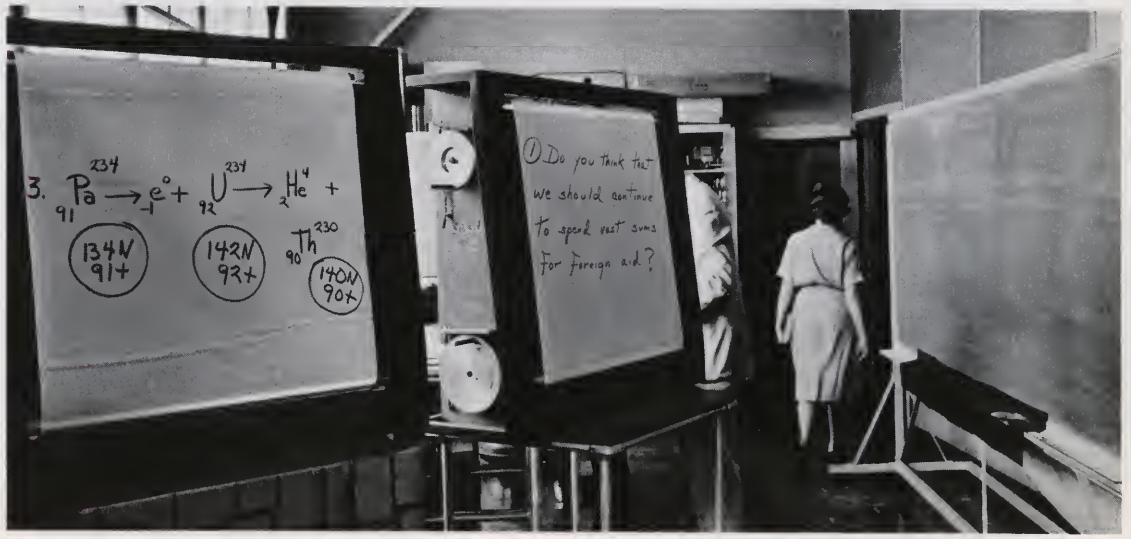
Except for the human brain itself, television is the most structurally complex instrument of education. ETV'S *impact on education has been and will be decidedly influenced by its technology. The major technical facts of life in* ETV *are:*

Circuitry—ETV *is transmitted either by closed- or open-circuit systems. Closed-circuit television usually operates over cables, like the telephone. Since it does not send picture and sound through the air, closed-circuit television requires no allocation of television channels and is outside the jurisdiction of the F.C.C. It reaches only so far as its cables reach. The most extensive system of closed-circuit teaching by television is at Hagerstown, Maryland, where most of the schools in an entire county are linked by cable. The principal drawbacks to closed-circuit sys-*

Hagerstown, Maryland, points proudly to its history as a famous wagon stop on the National Road, now U. S. 40; as home of Gruber's Hagerstown Almanac, three years older than *the* Farmer's Almanac; as first to fluoridate its water system; and as the site of fine schools and a pipe-organ factory. Since September, 1956, perhaps its most widely known civic attraction has been ETV.

Hagerstown is the center of the Washington County Closed-Circuit Educational Television Project. The most intensively developed in-school television system in the United States, it draws about 2,500 visitors a year from every state and continent—teachers, school administrators, journalists, technicians, and the plain curious. A full-time official had to be hired to handle visitors and requests for information. ETV workshops are conducted for teachers from other school systems. Hagerstown school personnel are in demand to speak throughout the country, and School Superintendent William M. Brish visited India as a consultant on introducing televised instruction in secondary education.

As a showplace for ETV, Hagerstown is both typical and atypical. No school system's ETV program has been so heavily subsidized. The Ford Foundation and the Fund for the Advancement of Education have made grants totaling $1,173,910. Television and telephone companies have contributed more than $300,000 worth of equipment. New ETV teaching devices, like those shown below, have been born at Hagerstown.



Virtually every one of the 16,500 students in thirty-seven of the county's elementary and secondary schools receives at least one period of televised instruction daily. The Washington County ETV system has 74.3 miles of coaxial cable reaching into schools ranging from the ultra-modern 1,500-pupil North Hagerstown High School to the two-room, forty-five-pupil school in rural Beaver Creek. Since it is a closed-circuit system, more than one course at a time can be telecast. The system has six channels and telecasts a total of 125 lessons a week in all twelve grades and in all major subjects.

But with regard to the goals, operations, and effects of televised instruction, the Washington County project is similar to other school systems in that it closely coordinates ETV with classroom teaching.

The only course in which instruction is entirely televised is "Math for Mathematicians," which deals with the elements of calculus, analytical geometry, and other college-level mathematics. The course is an advanced, difficult elective in which only sixty-five students in four high schools in the county were enrolled in the 1959-60 school year. In outlying Hancock High School, only three students were enrolled; without television, no single school could likely spare a teacher for such a small number of students. In most of the classrooms where the course is televised, no teachers are present. It is broadcast Monday, Wednesday, and Friday. On Tuesday and Thursday, the teacher visits the high schools in rotation for review, testing, and discussion with students enrolled in the course.

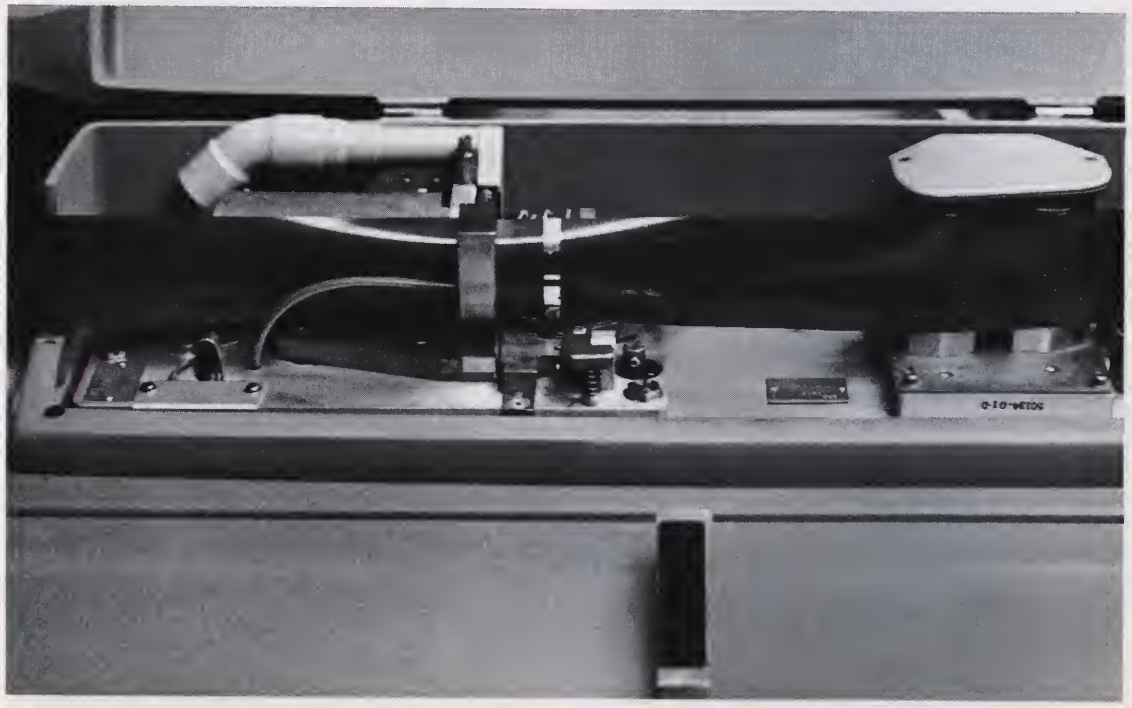
The Hagerstown project headquarters, Television Center, began in a corrugated metal shed and now has five studios, offices for twenty-six television teachers and supervisors, an art studio, and rooms for film storage and equipment — 14,000 square feet in all. The atmosphere is a blend of a busy broadcasting center and an academic setting. Charts, maps, textbooks, laboratory equipment, and blackboards are arrayed among dazzling klieg lights and electronic gear. Tacked on a wall of a cubicle housing the videotape machine, as shown in this photograph, is a note of Robert Burns' wish come true two centuries later:

tems are high cost and limited geographical range. Although there are about 300 closed-circuit installations in schools and colleges in the United States, the most rapid growth in instructional television—and virtually all of general-audience ETV*—is taking place over open-circuit systems.*

Open-circuit broadcasting: VHF and UHF—*Open-circuit* ETV *requires Federal allocation of an assigned frequency in the television band. One of its principal advantages is wider geographical coverage. There are two types of open-circuit channels, very-high frequency (*VHF*) and ultra-high frequency (*UHF*).* VHF*—channels 2 to 13—is by far the most common system, commercially and educationally. Less than eight per cent of the television receivers in the United States are equipped to receive* UHF

Videotape is a plastic ribbon, two inches wide, coated on one side with iron-oxide particles. Like motion-picture film, it stores sound and moving pictures; unlike film, it does not have to be chemically processed before it can be played back. A few seconds after a scene is recorded on videotape, it can be shown over a television screen. The difference in quality between the live and taped performance is virtually undetectable. Motion-picture film consists of a series of frames—individual snapshots which, when run at a certain speed (twenty-four per second in ordinary 16 mm. motion-picture film), give the visual impression of continuous motion. On videotape, the sound and sight consist of hundreds of thousands of invisible electronic impulses, as many as three million per second on a single inch of tape.

The Ford Foundation in 1959 and 1960 granted $4,588,000 for the purchase of videotape machines and tape for sixty-nine present and future ETV stations. At the same time, the grants made it possible for the National Educational Television and Radio Center to purchase six videotape machines



for its tape-duplication facility at Ann Arbor, Michigan.

John F. White, president of NET, characterized the grants for videotape as "the most significant advance in ETV since the first station . . . began operations." An hour's worth of tape costs about $250, but it can be erased and used many times over. Classes or programs can be recorded at any time during the day or week. Tape is a boon in accommodating ETV production and viewing to class and teacher schedules. It permits the teacher to see himself as he appears on the screen; he can travel to classrooms and see immediately how students react to his lesson and how they take notes and ask questions in the follow-up.

Videotape facilitates exchange of lessons and programs among schools and colleges. Many colleges are now joining together in videotape networks. In a few years, National Educational Television will be primarily a videotape network.

Tape also facilitates re-runs. A class telecast live in the morning can be repeated on tape in the afternoon or evening. The ability to erase and edit also makes it possible to keep particularly valuable recorded lectures or courses up to date as new information becomes available. Thus, televised lectures—like a professor's notes on a subject he teaches year after year—can be built on a foundation of knowledge and experience and accommodate changes in the subject and in the teacher's own intellectual growth.

—channels 14 to 83. Although sets can be converted to receive UHF *as well as* VHF *for less than fifty dollars, only a small number of conversions have been made. Thus, although two-thirds of the 267 channels now reserved for* ETV *lie in the* UHF *band,* ETV *development has been most rapid in the* VHF *band—thirty-three of the ninety* VHF *reservations are already on the air. In contrast, only eleven of the 177* UHF *reservations have been activated.*

The fact that ETV *allocations in some of the country's major cities (New York, Los Angeles, Washington, and Cleveland, for example) are* UHF *is perhaps the chief obstacle to a full nationwide breakthrough in* ETV.

Narrow-band telecasting—*Unlike closed-circuit systems, which can carry several television signals*

We are accustomed to finding Alabama on the bottom step of the ladder in many education areas. . . . Therefore, when the state is a leader in one area of education, it is worthy of some note. Such is the case in the field of educational television . . .—The Tuscaloosa *News*

Alabama opened the nation's first live ETV network in 1955, after the Legislature appropriated $500,000 to activate three VHF educational channels. Ford Foundation funds have been granted since 1956 to assist production of televised in-school courses. Thoughtful educators and citizens in Alabama are first to acknowledge that the state has an uphill struggle to improve its educational system. The shortage of qualified teachers is acute. Many good teachers are lured from the state by higher salaries in neighboring Georgia and Florida. In 1954-55, nearly 500,000 pupils took instruction from teachers holding emergency teaching certificates.

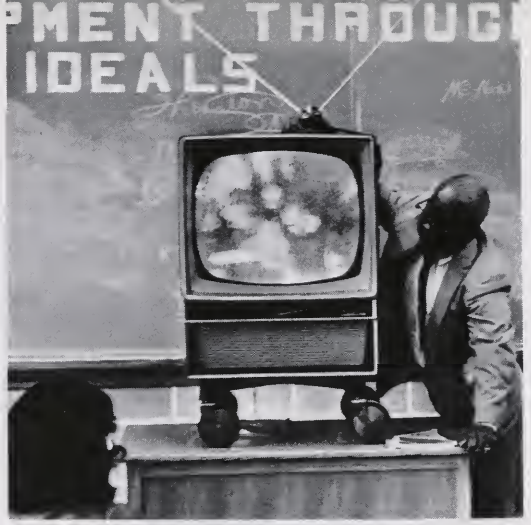
"We don't pretend that ETV alone is going to solve our educational problems," says Edwin L. Williams, Jr., a former teacher and Air Force historian who is ETV Coordinator for the Alabama State Department of Education, "but it has put us years ahead of where we would be otherwise."

Covering over 30,000 square miles, the Alabama ETV network consists of three stations linked by microwave relay stations: WAIQ, Andalusia; WBIQ, Birmingham; and WCIQ, Munford. Courses are fed to the network from studios operated by the University of Alabama in Tuscaloosa; Auburn University, Auburn; and the Greater Birmingham Area Educational Television Association, Birmingham. On the college level, the University of Alabama telecasts several credit courses.

More than 300,000 pupils in more than 600 schools in four-fifths of the state are using ETV programs. Alabama educators pin their hopes on two aspects of ETV. One is the teaching of subjects for which many schools have unqualified teachers or none at all—music, art, languages, and the sciences. (ETV returned Latin, which had been dropped a generation ago, to Alabama schools.) The other is the upgrading of teachers by telecasting in-service programs on teaching techniques and guidance, and courses to help teachers attain regular teaching certificates or degrees.

The ETV network provides a range of opportunities even in an educational system caught short in the 1960s. For example, it enables 450 students in fifteen Alabama high schools to watch an up-to-date televised course in Russian four days a week. And youngsters in schools that lack a single piano or record player are now dancing and singing to the upper-elementary-grade televised course, "Music Time."

Sometimes human resources go far in offsetting the lack of funds. The consolidated school in rural Marbury, Alabama, has twelve grades, twelve



simultaneously, an open-circuit channel carries only one program at a time. This limitation is most keenly felt in in-school programming. Each semester a twelve-grade school system offers more than 100 different courses and a four-year undergraduate liberal arts college about 300 different courses. In a six-hour classroom day, only twelve half-hour units of instruction can be given over a single television channel. One of the technical goals of the Midwest Program on Airborne Television is to double the number of lessons that can be broadcast on a single channel.

Videotape—*Until 1960, National Educational Television "network" films and kinescope recordings were the principal means of reproducing* ETV *programs and lessons for exchange. Filming is time-consuming. Kinescopes, made by*

classrooms, and 400 pupils. "There are several dozen youngsters here with whom we never have an attendance problem," principal John Formby says. "They get their lunches free, and if they miss school, they miss their main meal of the day."

Beneath Formby's homespun drawl are thirty years of vigorous service to education. At one time he served as a consultant for the U.S. Government on rural education in Brazil. After World War II, he staged a one-man invasion of Washington. Buttonholing his Senator and moving the complex machinery of Air Force surplus-material disposal, he obtained several truckloads of machinery with which to establish a vocational program at Holtville High School that is now a model throughout the state. When ETV came along, Formby seized upon it and aroused local interest. "Folks in Marbury work hard, and we don't have much spare time or money for civic activities," says Formby. "This is a poor community without even a Lions or Rotary Club. But Marbury managed to be first in the county to buy television sets for its school. The money was raised by a barbecue. Chicken, milk, and even a Coke machine were donated. The fathers went out and caught enough fish to feed everyone twice over.

"My teachers are hard-working, but you can't expect them to teach math, Spanish, science, and English equally well. ETV has given them the assistance of a highly trained staff of educational specialists to help enrich classroom instruction."

THE
COMPREHENSIVE
SERIES
SOCIAL STUDIES MAPS
of THE UNITED STATES
Modern School Supply Company · Goshen Ind.

placing a motion-picture camera directly in front of a television screen, are not uniformly satisfactory. A major technical revolution occurred with the development of videotape, a system of high-quality recording of the picture and sound of a telecast on magnetic tape. To accelerate the videotape revolution in ETV, *the Ford Foundation granted $4,588,000.*

State and regional networks—*In "live"* ETV *networks, lessons or programs are telecast simultaneously over two or more* ETV *stations. Networks may also operate by beaming a signal from one station to another for taping for broadcast at some later time. Or tapes themselves may be duplicated and exchanged among stations. Assistance to state and regional networks is one of the latest aspects of the Foundation's support for* ETV.

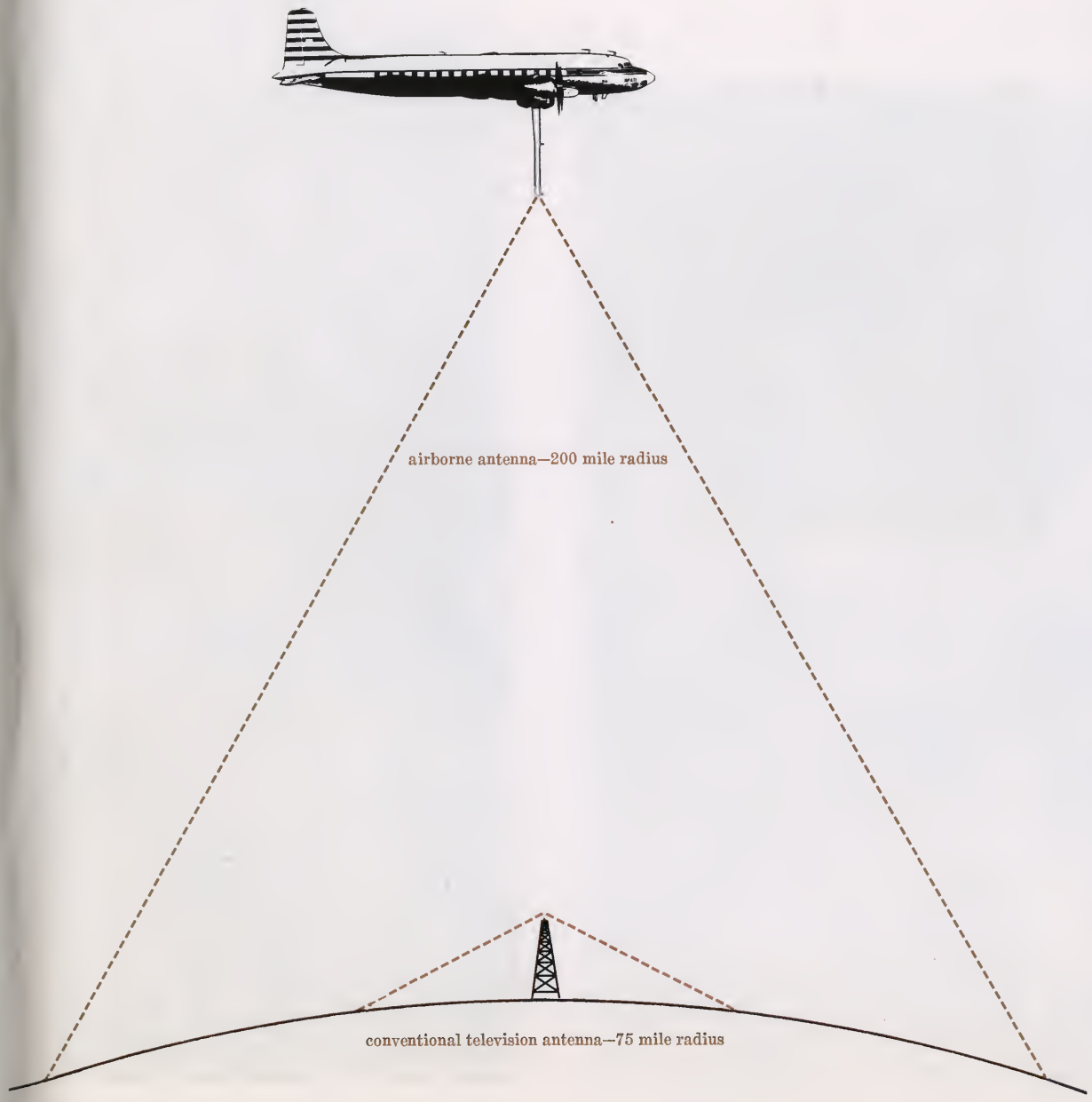
Aeronautically, the plane shown in the diagram opposite is uninteresting and in many ways obsolete. It will set no speed or altitude records. But it may make educational and electronic history in an experiment that, in the words of a *New York Times* editorial, "staggers the imagination." The plane is a "flying classroom" used by the Midwest Program on Airborne Television Instruction (MPATI). It was scheduled to begin broadcasting tape-recorded courses to students in an area including parts of Illinois, Indiana, Kentucky, Michigan, Ohio, and Wisconsin in the Spring of 1961.

Educationally, the experiment has the same basic aim as other ETV projects: To bring a full, quality curriculum, plus the talents of outstanding teachers, to more students. The novelty lies in its scope. The plane serves as a "flying antenna" capable of reaching far more students, at a lower cost per student, than any existing ETV arrangement. By flying four miles above a point in northeast Indiana, the plane will transmit courses 150 to 200 miles in all directions to an area that includes five million students and 13,000 schools and colleges. It can reach big-city schools and remote rural classrooms with the same ease and at the same cost.

The experiment also has the potential for overcoming what is perhaps the greatest obstacle to full use of teaching by television—the limited number of courses a television system can broadcast simultaneously. The typical grade 1-through-12 school system has from 100 to 175 separate courses, and the curriculum is even greater at the college level. Yet the conventional open-circuit television system can broadcast only one course at a time—that is, one half-hour lesson at each grade level in a six-hour school day. (Closed-circuit systems, like Hagerstown's, can broadcast several courses simultaneously but are costly over appreciable distances.) The airborne experiment will begin by telecasting over two channels allocated to it by the F.C.C. and may eventually broadcast over as many as six, for a total of six lessons at *each* grade level during a school day.

Initially financed with Ford Foundation grants of $5.5 million and funds from other foundations and industry, the project is designed to be self-sustaining ultimately with contributions from participating school systems.

After a period of demonstration telecasts, a full academic year of airborne telecasts will begin in September, 1961. Educational preparations for the opening of the experiment rivaled the intricacies of the electronic research necessary to get the experiment off the ground. The project was guided by a council of Midwest educators headed by Dr. Samuel M. Brownell, former United States Commissioner of Education and presently superintendent of schools in Detroit. Another group of educators selected the courses after consulting school officials throughout the region. A third committee conducted a talent search by viewing kinescoped recordings of about 300 teach-



ers and selecting sixteen. MPATI also produced manuals, supplementary texts, and syllabuses to help schools receiving the airborne courses. Teachers and officials of schools volunteering to use the telecasts attended workshops at nineteen colleges and universities. A separate summer-long workshop was held at Purdue University for the airborne-television teachers. They then dispersed to six ETV stations to begin recording their courses. Most of them will devote a full school year to preparing 128 half-hour lessons. Because each lesson may reach hundreds of thousands of students, the teachers have the aid of curriculum specialists, research assistants, artists, and other resources that not even the most affluent school system could normally afford.

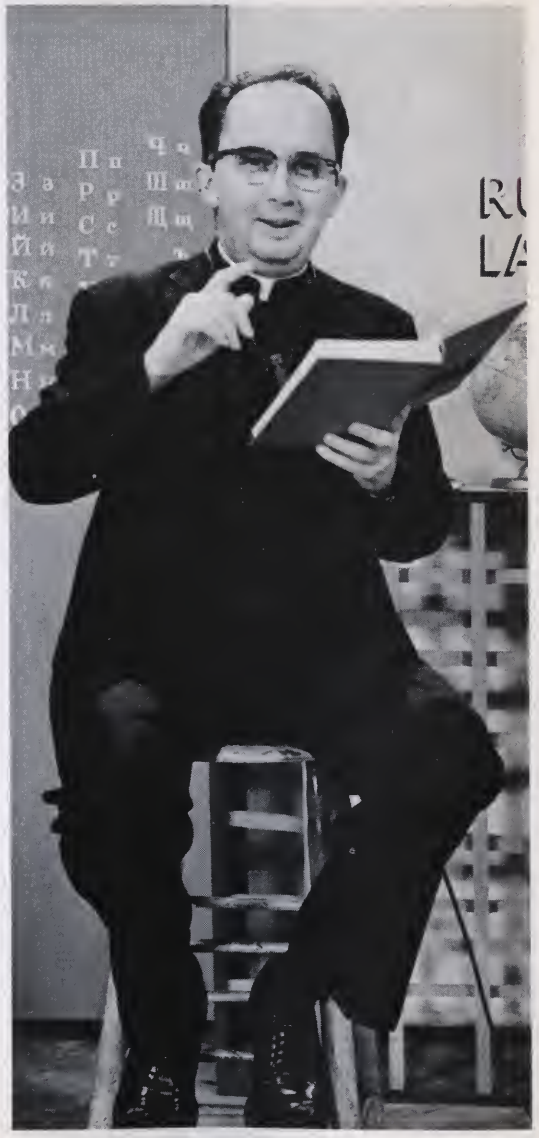
The project's eventual expansion to broadcasting over six channels, for a total of seventy-two half hours a day, may come through the use of "narrow-band" telecasting, a new method whereby broadcasts occupy only three megacycles in the television band instead of six, thus doubling the number of telecasts possible in the same wavelength. Courses scheduled for the first year of airborne telecasting on the school level include Spanish, French, social studies, arithmetic for gifted children, art, music, literature and composition, history, geography, and science; on the college level, chemistry, mathematics, and Russian.

On the basis of weather studies, experts estimate that the airborne system will be able to operate more than 95 per cent of the time.

The men and women who face the ETV *cameras are variously referred to as "the talent," "on-camera professors," "lecturers," "teleteachers," "moderators," "narrators," or "studio teachers." The value of* ETV *hinges on their knowledge, skill, and enthusiasm, despite the elaborate technology, painstaking administrative planning, and ingenious visual aids.*

Although non-teachers from many fields occasionally supplement and enrich ETV, *the screen is occupied most of the time by men and women from the staffs of schools, colleges, and universities, whether the program is for academic credit or for general interest.*

This is not to say that teachers and professors treat ETV *simply as a classroom or lecture hall with students at a distance. The teacher on television has new masters—the me-*



dium itself, and the people who operate the medium. He controls what he says and shows, but how he says it and shows it, where he stands, and scores of other details are determined in conjunction with producers, directors, lighting experts, and other technicians.

Yet conflicts in ETV *between showmanship and the integrity of the educational objective are infrequent and are invariably resolved in favor of education.*

Similarly, in the selection of ETV *teachers and personalities, presence and appearance are important, but secondary to teaching ability and knowledge of subject.*

Many college professors were brought to ETV *by a series of Ford Foundation grants beginning in 1955. Totaling $750,000, they enabled twenty colleges and universities to pay the salaries of faculty*

Seated behind an old four-pedal piano, a derby tilted above his deep-socketed eyes, Max Morath looks like an old Tin Pan Alley song plugger. That is how millions are seeing Max Morath in "The Ragtime Era," a series of which he is the writer and narrator. The twelve-week series was produced by KRMA-TV, the ETV station in Denver, and began being shown on the NET network in the fall of 1960. But Morath is neither old nor a song plugger. He is thirty-three and a graduate of Colorado College, with a major in English. He did graduate work at Stanford University. Music, particularly the music reflecting the colorful days of the mining boom in the Colorado hills, is his stock in trade as a composer and recording artist.

On the surface, "The Ragtime Era" is a musical series—Morath at the piano, by himself most of the time, occasionally with a barbershop quartet, a ballroom dance team, or a Dixieland band. Beneath the surface, the series presents a cultural history of the United States from 1890 to 1920 through a study of popular music. Between songs, Morath describes what he terms "the personality and morals of America in a time that, in retrospect, was gentle and naive." The series was conceived through the familiarity of one of KRMA's producers with Cripple Creek, an old gold-mining camp that has been restored. Morath is musical director of the summer season of musical melodramas at Cripple Creek's Old Imperial Hotel.

The series also traces the beginning of unique American contributions to music: ragtime, jazz, and musical comedy. It conveys basic knowledge of syncopation, improvisation, time signatures and rhythm, harmony, and the structure of popular musical forms. Collaborating with Morath in research for "The Ragtime Era" is Dr. Albert Seay, a musical scholar who teaches at Colorado College. The series draws material from Morath's years of research, his extensive library of reference works and sheet music, and a collection of 10,000 song slides owned by a Topeka, Kansas, man.

Morath insists on using authentic instruments in authentic arrangements, "no matter how awful they sound." Among other things, therefore, the KRMA staff rounded up an antiquated snare

MUSICAL COMEDY
ALBUM

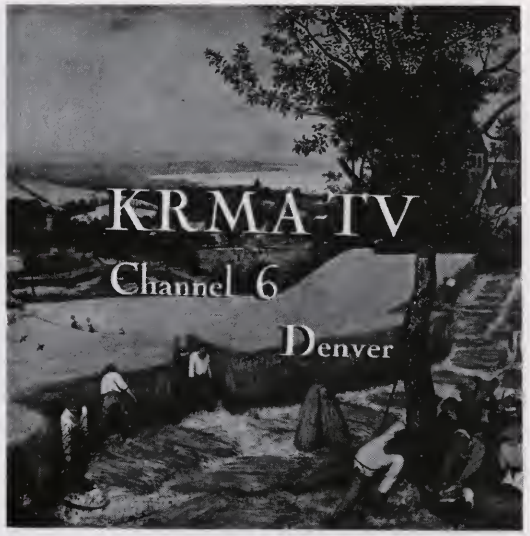
members released for full-time participation in program series of local ETV *stations or educational telecasts over commercial channels. The grants gave to general-audience* ETV *the talents of scholars like law professor Zechariah Chafee, physicist Harold Urey, and semanticist I. A. Richards.*

A college professor who devotes time and effort to ETV *often does so at the expense of publication and other traditional activities more certain to move him up the academic ladder. By 1959,* ETV *stations were more firmly established, and faculty members throughout the country were taking fuller advantage of educational programming. Accordingly, the Foundation shifted the emphasis of the grants to supporting college-faculty participation in* ETV *teaching for academic credit.*

drum and a sixty-year-old banjo. Finding other props was little trouble, since suddenly-rich mining millionaires had vast appetites for gaudy furniture and Denver is replete with antique shops.

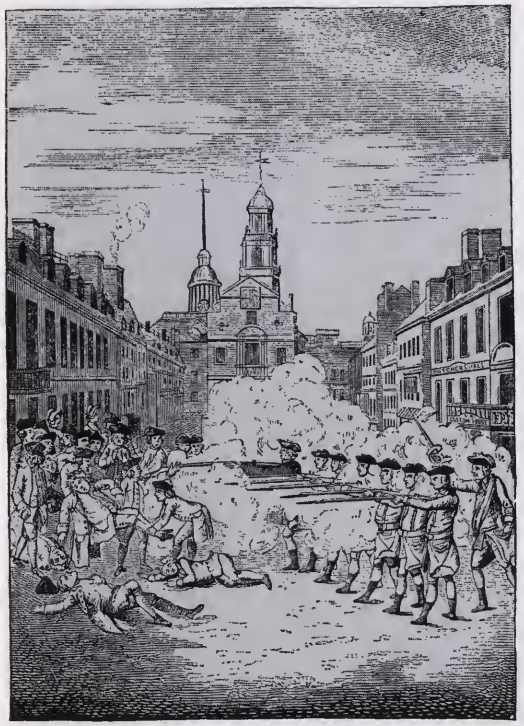
Although Morath is the focus, about twenty KRMA staff members have worked on the series. Its combination of painstaking details and essential simplicity reflects the direction of James W. Case, the station's indefatigable program director.

A thirty-two-year-old veteran of commercial television, Case, who has directed such ETV network series as "Redman's America" and the soon-to-be-released "Our Neighbor: The Moon," insists that rigid professional standards guide KRMA's programming. He impresses the educational stamp of the station even on the fifteen-second station-identification breaks between programs, each of which is a production in miniature. The station's letters are superimposed over reproductions of works of art, ranging from a Rembrandt or Picasso painting to a Frank Lloyd Wright building. Classical music accompanies the break. KRMA's sign-off at the end of the day may be a Walt Whitman poem or a folk song played against a series of paintings, woodcuts, prints, and photographs.



A credit course on ETV *can seldom be done well on a spare-time or part-time basis. Schools and colleges using* ETV *often give faculty members full time to prepare and deliver three thirty-minute televised lessons a week. The medium demands more careful planning and pacing. The instructor cannot linger over the allotted period to dwell on a point; nor can he trail off and dismiss the class five minutes ahead of time. One of the notable side effects of teaching by television is that thousands of classes are now getting through the whole course.*

Standards are similar for "the talent" in general-audience ETV. *He must be master of his subject and skillful in its presentation. Dullness, condescension, or abstruseness are as easily escaped in* ETV *as in commercial television by a merciless flick of the dial.*



"So you see, this illustration is purely fictitious," Professor Crane Brinton tells his television viewers, pointing to the classic Paul Revere engraving of the Boston Massacre. "British troops would never have formed themselves into such a close-packed, easy target in those days when the patriots' favorite sport was baiting redcoats." Brinton goes on to describe other historically inaccurate details of the print familiar to millions of Americans from their history textbooks. He concludes: "It does have value as an illustration—to show Paul Revere's skill as a propagandist." Brinton's own illustration is part of a series called "Anatomy of Revolution," produced by WGBH-TV, Boston, and distributed by the National Educational Television network. The fifteen-part series is a study of the world's major revolutions from the American Revolution through the Hungarian and Cuban uprisings of the 1950s.

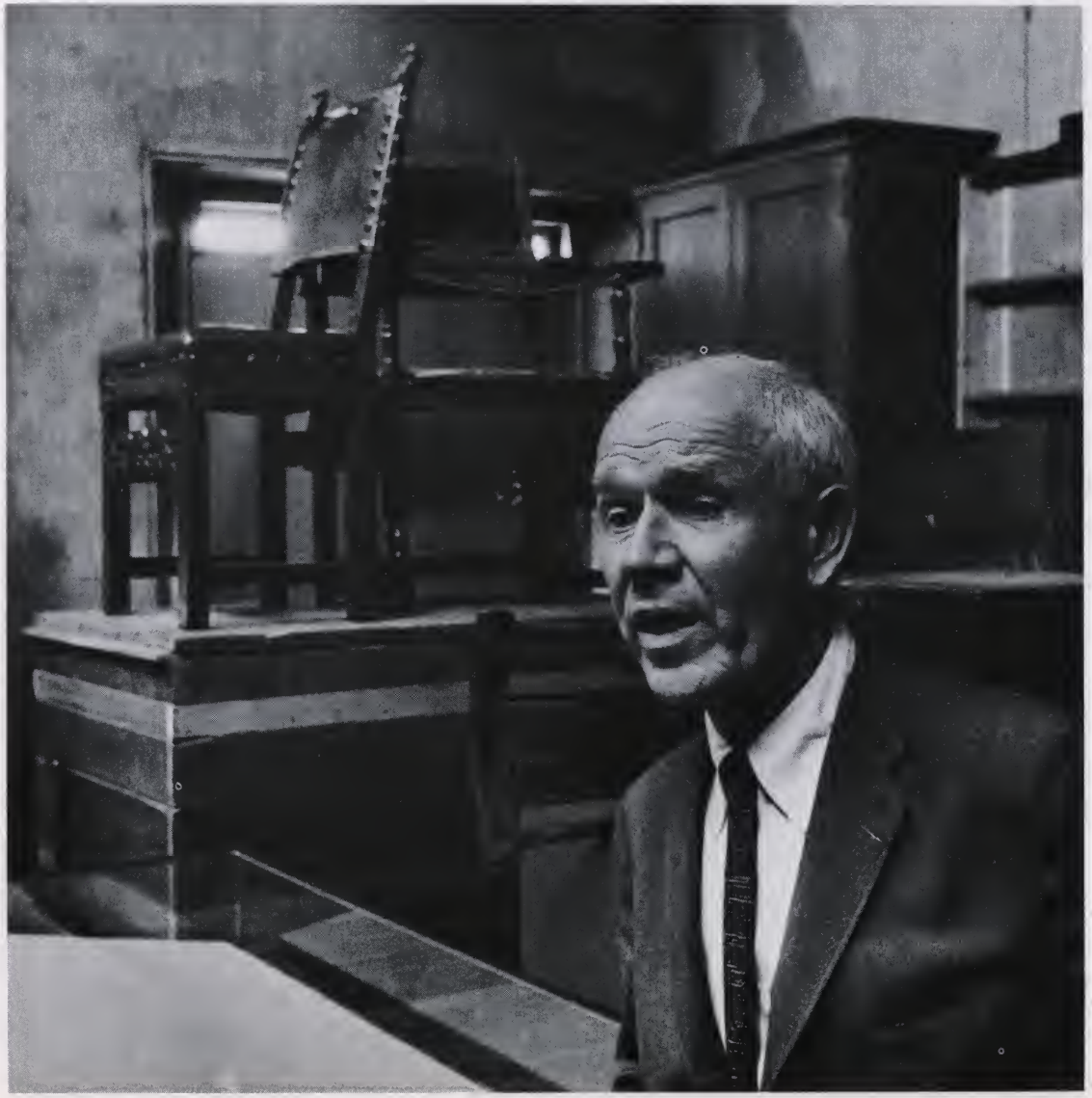
An admired Harvard professor, Brinton is one of the world's foremost historians. A Rhodes Scholar and the author of a dozen major books, he holds what many regard as the highest nonadministrative position on the Harvard faculty, chairman of the Society of Fellows.

This sixty-two-year-old scholar, says Robert L. Larsen, his director for the series, "has put his heart and soul into the television series. Despite a reverence for the precision and power of written language, Professor Brinton has a keen sense of the visual aspects of his subjects. He even scribbles notes on the video side of the script. He's suggested illustrations we never would have thought of."

The respect is mutual. Of the ETV staff, Brinton says: "No matter how jealously a teacher guards his subject, he will communicate it more effectively if he puts himself in the same position with regard to professionally skilled television people as he would with the publisher of a book of his. Though some of my books have had fairly wide circulation among general readers, I've never diluted material in a book, nor would I in this series."

Much of the series (and its title) stems from a book Brinton wrote in 1938, but Brinton found the series' preparation as strenuous as working out a new high-level course at Harvard. Although the series is primarily for general viewers, it is also offered for credit toward the Adjunct in Arts degree that Harvard University grants to qualified men and women in the Boston area.

In addition to Brinton's own preparation and research, Larsen and Jacques Kornberg, a graduate assistant, have scoured libraries, museums, and rare-book collections for such material as excerpts from films of twentieth-century revolutions, original newspapers from eighteenth- and nineteenth-century revolutions, and relics like ship money, revolutionary pamphlets, and a red armband from the Russian Revolution. The series turns on a thesis developed by Brinton over many years of study: Many, if not most, of the revolutions in modern history have distinctive elements in common (for example, they are neither wholly spontaneous nor wholly plotted) and thus the historian can study revolutions with scientific methods. Professor Brinton's series, then, is an exhibit of scholarly insight. Yet the medium permits him to employ his characteristic urbanity and wit. Being "spiked" (directed where to stand) in a windowless, equipment-strewn studio, Brinton maintains his good humor. And during one rehearsal, no one in the studio laughed louder than Professor Brinton himself when, instead of the term "underground revolutions," he said "undergraduate revolutions."



"Early in the game," recalls one ETV *station manager, "many of us were troubled by a kind of occupational schizophrenia: Were we basically educators trying to be broadcasters or broadcasters trying to be educators? I think* ETV *came of age when we stopped asking that question, not because it was answered but because it became unreal.* ETV *became a fusion of the highest professional skills of both education and broadcasting."*

The offstage players include educational supervisors, curriculum specialists, and psychologists on the one hand, and producers, artists, cameramen, and other studio personnel on the other. Many of the latter have declined better-paying jobs outside ETV. *Indeed, many are veterans of commercial television. Their acute consciousness of* ETV's *central educational purpose is re-*

As a lighting director for the Columbia Broadcasting System, Greg Harney, Jr., had worked on the commercial network's top-rated musical and dramatic shows. The pay was good and the facilities unsurpassed, but after eight years at C.B.S., he could look forward to a lifetime professional career only in the specialized field of television lighting. For Harney, whose theatrical interests include acting in the community theater and playing the folk guitar, that prospect was too confining. In 1958, Harney participated in a Ford Foundation program designed to lend the talents of commercial-television specialists to ETV. He later took a one-year leave of absence from C.B.S. to serve as production manager for WGBH, the ETV channel in Boston. Harney found the kind of wide-ranging professional stimulus he had been looking for. The job called forth his skills not only in lighting but in direction and other aspects of production. He remained with WGBH.

One of the first ETV works Harney directed was "A Time to Dance." The nine-week series was conceived and written by Martha Myers, associate professor and teacher of dance at Smith College. It was built around her discussion of the history and theory of the three basic forms of dance: ethnic, classical, and modern. The narration was vividly reinforced by the use of film clips, old ballet prints, sculpture, and performances and demonstrations by such dancers as Maria Tallchief, Andre Eglevsky, Jose Limon, Nora Kaye, Geoffrey Holder, Bambi Linn, and Melissa Hayden. "Although painstakingly re-

searched and carefully planned, the series was shot in a frenzy,'' Harney recalls. ''The dancers were flown from New York to Boston on weekends. Our production staff worked seven days a week for nine weeks. We had what commercial television would consider practically no rehearsal time and an undermanned technical staff.'' Yet, in the words of a typical review, ''There is about the whole affair an atmosphere of ingenuity and imagination, of faultless taste and dry wit.''

''Sure, there are handicaps in ETV,'' says Harney. ''You can never call the 'talent' your own, whether it's a professor or a ballerina. A director does four or five shows a week; in commercial television he'd be doing two at most. But the handicaps are compensated for by freedom from inhibitions and by the air of experiment.''

This kind of ETV versatility is illustrated in music alone at WGBH not only by ''A Time to Dance,'' but in offerings like the weekly series on jazz, conducted by Father Norman J. O'Connor of Boston University, and the famous telecasts of the Boston Symphony Orchestra. The latter, now in their sixth consecutive year, are masterpieces of the union of a new medium with a traditional art form. There are no television rehearsals with the orchestra, but Harney's colleagues, producer Jordan Whitelaw and director David Davis, spend hours reading the score and listening to recordings so that, as Harney puts it, ''when the symphony is telecast, Jordan and Dave play the cameras as the orchestra plays the instruments.''

flected by a spirit of self-criticism. Instead of relying only on the favorable newspaper criticism they enjoy, the creators of ETV *apply tougher measurements. For instructional television, these include achievement by students, effectiveness of televised material in classroom follow-up, and the reaction of students and classroom teachers. For general* ETV *programs, the test is the degree of community support —as tangible as meeting the payroll.*

An enterprise that spends money instead of making money, ETV *is an endemically low-budget operation. Sensitive to the possibility that "noncommercial" may be equated with "amateur," many* ETV *station managers maintain rigid requirements. They are often the envy of their commercial counterparts, because in most cities the* ETV *station does far more live programming.*

Consciousness of educational purpose is keen even in ETV dealing with entertainment forms. The series "Great Plays in Rehearsal," for example, consists of the rehearsal of scenes from theater classics, with frequent and deliberate interruptions to permit explanations of key points or replayings of scenes. "Thus," says Professor Raymond J. Stanley of the University of Wisconsin, executive director of the series, "not only is the audience exposed to the content of great plays like *Candida, The Master Builder, Lysistrata,* and *The Misanthrope,* but its attention is compelled by an effective teaching technique."

Tapping a stiff sheet of corrugated fiber glass, Howard Hansen explains, "It's been lying around here for months. We got it for a particular purpose, then found it wouldn't work. Yet we can't do much else with it. It's already formed. Your imagination can't play on it."

Hansen, an artist and set designer for KRMA-TV, the educational-television station in Denver, is more at home with common materials (burlap, wood, plaster, cardboard, paint, string), of which his imagination makes uncommon use. The storage areas of KRMA's studios display the crazy-quilt evidence of his inventiveness—a cardboard submarine conning tower, a replica of an adobe-and-log church, a gaudy backdrop for a scene in a dance hall, a toy-house set for a children's show.

Low budgets, tight schedules, and limited staff challenge an ETV artist's ingenuity. In making

sets for Professor Ruth Underhill's series "Redman's America," Hansen decided to do chalk drawings, instead of painting; "much faster and much less messy," he says. Because photographs of a tribe of naked Indians could not be used, he depicted them with plaster-lath figures.

Hansen's supervisor, art director Don Allen, directs not only the scene-design activities at KRMA but the collection and preparation of visual aids as well. His eye for accuracy and authenticity has traced objects ranging from a particular type of door knob to World War I uniforms. In an optometrist's office he once sighted just the chair he'd been hunting and rented it on the spot. And he solved a nest of shipping problems to get a fragile Indian headdress made of hummingbird feathers from a California museum. For title cards, he has used antique printing-type faces unearthed in old mining towns.

Artwork for television benefits from the camera's benevolent blending. Sets, drawings, and props that look unfinished to the naked eye appear authentic on the screen. On the other hand, the medium demands particular care in handling color. The black-and-white television camera transmits only three basic values of gray. "Yet we use colors in our sets and costumes for their psychological value to the performer," says Allen. "This avoids the pall that an environment of grays and blacks might well cast. The colors must be chosen skillfully to reproduce in the proper shades of gray for television transmission."

The men, women, and children watching ETV *often respond, as individuals or as groups.*

One kind of response is the written letter. In commercial broadcasting, the accepted maxim is "they only write when they don't like you." In ETV, *the writing impulse is the reverse. The letters opposite typify the reaction of viewers to non-school programming by* ETV *stations. The mail is so one-sided, in fact, that some* ETV *station managers, while grateful, refuse to put great store in it as a measure. "Remember," said one, "they are seeking educational television as earnestly as* ETV *is seeking an audience. Once you find something you've hungered for, your reaction is bound to be favorable."*

Another kind of response is expressed in dollars and cents. Where ETV *is tax-supported in part or in*

May 5, 1958

W. M. V. A.
C Channel 10
Milwaukee Wis.

Gentlemen -

May I tell you how very much our family enjoyed the program of April 25th that presented the concert by the Boston Symphony Orchestra.

Our children, aged 7 and 11, expressed such pleasure in the music that one was reminded again just how much television could enrich and educate.

Thank you for pointing the way.

Mrs. William L. Robertson
155 N. 79th Street
Milwaukee 13 Wis.

February 29, 1960
1514 North 42 St.
Lincoln, Nebraska.

Dear Hers Hake-

We swallowed our supper whole, stacked the dishes in the sink and hurried to History with Hers Hake-we enjoy it very much as we do most of KUON shows. Thank you.

Mrs Lois Dalling

MRS. ALFRED M. JONES
4667 NORTH MURRAY AVENUE
MILWAUKEE 11, WISCONSIN

April 25, 59

WMVS.-TV
Milwaukee.

Dear Sirs: -

The Childrens program at 6.30 last evening was excellent but too late for young children who would have loved it. Do put it on at 7.0 clock next time for my grand children were in bed for this one.

I am enjoying your programs tremendously especially the Japanese Brush paintings. Never

ALLENSVILLE SCHOOL
OFFICE OF THE PRINCIPAL
ROXBORO, NORTH CAROLINA

September 23, 1958

WUNC TV
Program director
Chapel Hill
North Carolina

Dear Sir:

This is to thank you for showing "Crowded Out" on September 21 at 7:30 P.M.. Although our situation is opposite from the movie plot, I received more clearly an awareness of the problem confronting many Communities.

Yours very truly,
R. W. Bryant

DRINK
JAX
WELCOME TO
NEW ORLEANS
HELP SUPPORT
WYES - TV
YOUR COMMUNITY STATION
INDUSTRIAL

full, it is in the voters' hands. Sometimes, support comes directly from individual viewers. In Boston, individuals contribute $10 a year to become subscribers to WGBH, and this pays almost half of the station's annual $450,000 operating expenses. In San Francisco and elsewhere, the public responds to special fund-raising drives for ETV. *In other communities, financial aid comes from civic groups, corporations, philanthropies, newspapers, and commercial broadcasters.*

ETV *repays community support with the kind of direct educational and cultural enrichment described in this report. It is powerful as an instrument for teaching fundamentals; the* ETV *channel in Memphis has taught more than 1,000 illiterates to read and write. And it is useful in more mundane ways. In a series conducted over WCET,*

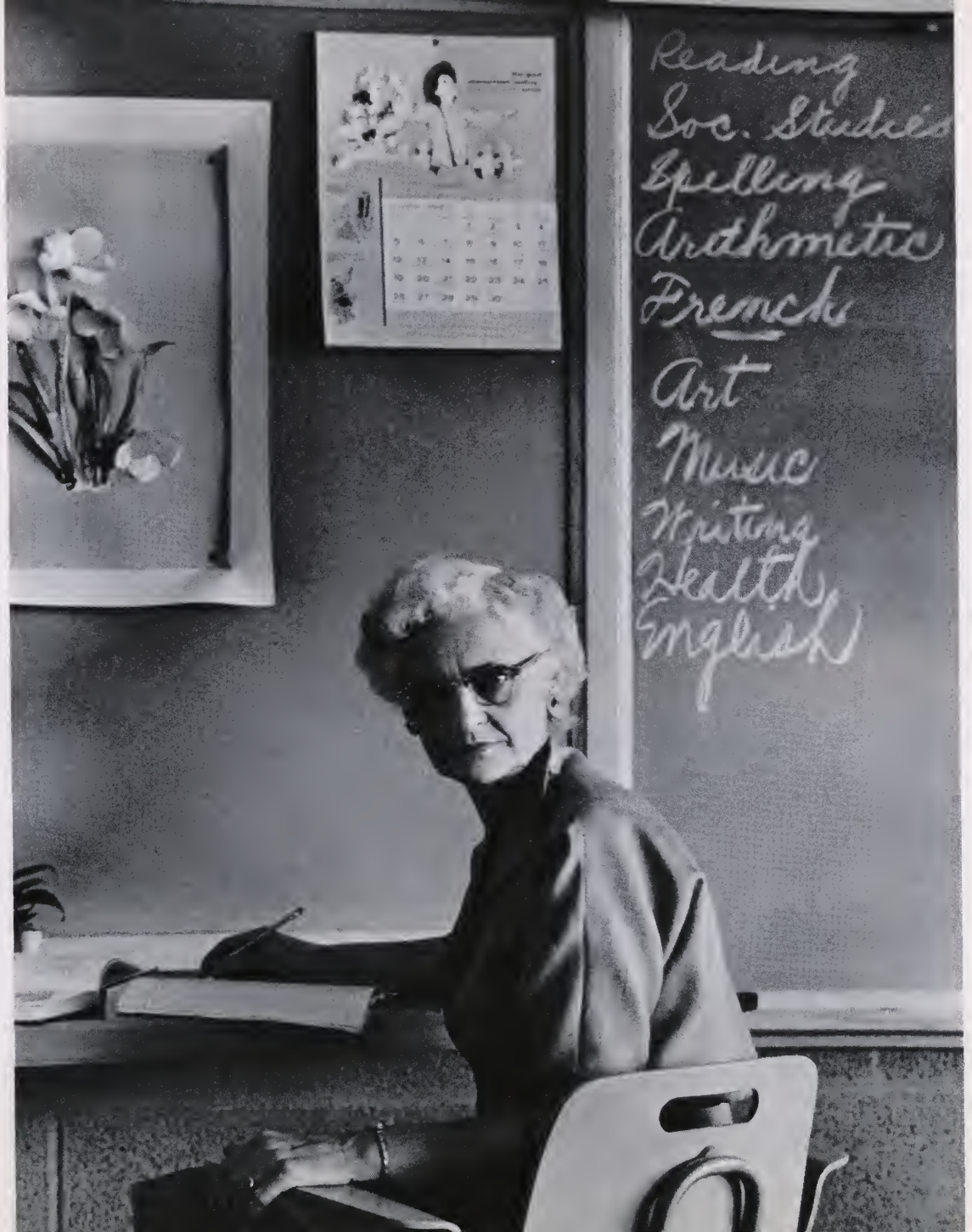
After thirty-two years of teaching under a variety of good, bad, and indifferent conditions, white-haired Marian V. Gittings might be expected to be hardened to the realities of schooling and inhospitable to changes in the ways of the classroom. Yet when ETV came to the pleasant, modern elementary school in the middle-class Hagerstown residential section where she now teaches, Miss Gittings reacted with neither indifference nor hostility. A classroom teacher, she sums up her reaction to ETV by the adage, "two heads are better than one." Long experience has sharpened Miss Gittings' sensitivity to pupils' problems. Reading is one of them, one on which ETV has made a major attack. "Remedial reading is an essential part of elementary education these days," she notes, "but all teachers know that it carries with it a social drawback. Special reading classes sometimes stigmatize pupils. Poor readers are singled out as 'different.' A child's mind can magnify this deficiency into a major personality defect. The remedial and developmental reading courses given over television eliminate this kind of separation and possible stigma. What is equally important, they help increase the reading speed of pupils with average or good reading ability.

"And take science in the grade school. I've had no special training in science, but I try to keep up enough so that I can teach some of the elements. It isn't easy. There's never enough time, and to simplify without sugar-coating takes a lot of preparation. Once I was teaching my class

about what makes it snow. After a while I'd used up all my blackboards. Now this can be taught better, and more briefly, in a televised lesson where the teacher has had as much as two or three solid days to prepare. And, of course, in an elementary-grade classroom, you wouldn't want to fool around with live snakes and with charges of electricity, things that can be handled safely in a televised lesson.

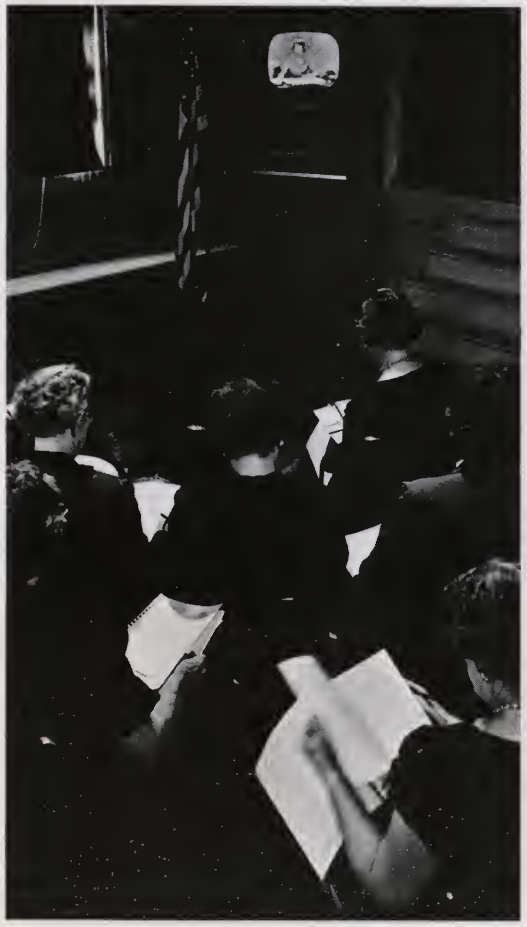
"Neither I nor my pupils regard the television teacher as a distant, mechanical person. I used to think I knew most of the tricks of the teaching trade and could be coldly objective about another teacher's performance. But you know, when the time comes in a televised music lesson for the children to sing, I find myself joining right in with them in full voice, not just because I ought to, but because I'm just as taken with the lesson as the children are. I'll tell you something else, too: I don't have the voice the music teacher on television has!

"Far from diminishing the teacher in the classroom, ETV makes the classroom teacher loom larger in the children's eyes. The better a televised lesson is taught, the more curiosity it arouses, and once youngsters are started off on a round of questions, you'd better be on your toes. Television keeps us classroom teachers moving, and if that makes life harder, it's made easier by the fact that we learn new ways of presenting our subjects to our pupils by watching other teachers in action."



Cincinnati, home-building experts help viewers plan, build, or buy homes. In the same city, traffic violators receive cards advising them to watch an ETV *safe-driving series.*

The audience for the in-school aspects of ETV *consists of students, classroom teachers, school officials, and the community. Even in extremely cost-conscious communities,* ETV *is seldom promoted as a tax-saving device. It is regarded as one of many educational resources, along with school buildings, teachers, and textbooks. After a while, students begin to pay less attention to the medium as such and judge televised instruction more on the basis of its quality. And to teachers and school and college administrators,* ETV *is fundamentally a versatile tool, only as useful as the imagination and ability of the people behind it.*



And these are voices from the other part of the classroom audience—the students:

"I really dreaded coming into TV English, but it has proved to be the most interesting and rewarding English class of my school career."

"Mr. Layne seems to bring out something our regular teachers can't do. I guess he has more time to prepare it."

"My mother likes to watch the telecasts. She says she learns a lot."

"My opinion of TV classes is very low. There is not enough class participation."

"Because of the excellent outline sheets that are provided, we are able to grasp more."

"I asked for thirteen copies of the test given in Spanish over television. They were for the Spanish class I give in the basement of our house, for my brothers and sisters and other kids."

"This course really forces you to stay on the ball. The studio teacher moves on each day, and you must work to keep up with her."

"I miss the colors and smells in chemistry."

"The part I've enjoyed most is chemistry. I have read several new science books on my own."

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The chapter-by-chapter bibliography is confined primarily to material published by the Ford Foundation, related organizations, or grant recipients. Most of the material is available free on request. Only material marked with an asterisk (*) is available directly from the Ford Foundation, Office of Reports, 477 Madison Avenue, New York 22, New York. Program guides of individual ETV stations are available by writing the stations.

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Photographs

2	KUON-TV University of Nebraska
3	WCET-TV Cincinnati
*4 (top)	Roy Stevens
4 (bottom)	National Broadcasting Company
*5	Roy Stevens (left); William Simmons (center)
5 (right)	KETA-TV Oklahoma City
*6	Roy Stevens (left); William Simmons
*7	William Simmons
9	Tommy Weber
10	University of Arizona
*11, 12	William Simmons
13	Arizona State University; KQED-TV San Francisco
*14	*(Jean-Louis Barrault)* Roy Stevens
*15	*(Allan Nevins—"John Adams")* Roy Stevens
*17, 19, 20, 21	William Simmons
23	Pennsylvania State University
24 (top)	*(Dr. Wendell M. Stanley—"The Nature of a Virus")* KQED-TV San Francisco
24 (bottom)	*(Carl Moss—"The Sculptor")* KETC-TV St. Louis
*25	Roy Stevens
*26, 27, 28 (top)	Arthur Leipzig
*28 (bottom)	William Simmons
29	WDTR-TV Detroit
*31	Carl Vermilya from Pix
*32, 33	William Simmons
*34	Roy Stevens
35 (left to right)	Fisk University; Pennsylvania State University; Michigan State University; Pennsylvania State University; Marquette University
37	*(Dr. Harvey E. White—"Atomic Age Physics")* National Broadcasting Company
*38, 39	Roy Stevens
40	Minnesota Mining & Manufacturing Company
41	WGBH-TV Boston
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*44, 45	Arthur Leipzig
47	Westinghouse Electric Corporation
48 (left)	*(Professor Albert E. Burke—"Geography for Decision")* National Educational Television and Radio Center
48 (right)	*(Father C. J. McNaspy, S. J.—"Russia's Language")* WYES-TV New Orleans
49 (left)	*(Dr. Charlotte Ward—"Upper Elementary Science")* Auburn University
49 (right)	*(Dr. Stephen Winters—"General Geology")* Florida State University
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64	National Broadcasting Company; Roy Stevens
*65	Roy Stevens (top); William Simmons (bottom)

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THE APPRENTICE EXPERTS:
A description of some of the fellowship programs conducted or supported by the Foundation.

ARCHITECTS OF ORDER:
An account of the International Legal Studies program.

THE FORD FOUNDATION AND ST. LOUIS:
The story of the Foundation's assistance to civic and educational progress in a representative American community.

THE FORD FOUNDATION PROGRAM IN HUMANITIES AND THE ARTS:
The objectives, methods, and initial grants of this program.

METROPOLIS:
An account of the Foundation's Urban and Regional program.

TIME, TALENT, AND TEACHERS:
A description of experiments in school- and college-teacher utilization.

THE WEALTH OF A NATION:
A cross-section of activities in the Foundation's program in Economic Development and Administration.

STATE AND REGIONAL BOOKLETS:
Summaries of Foundation grants in each state.

The Ford Foundation 477 Madison Avenue New York 22, N.Y.

Theodore Freedman

RECEIVED
NAEB HEADQUARTERS

OCT 30 1962

AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

October 29, 1962

Mr. Theodore R. Conant
The Ford Foundation
477 Madison Avenue
New York 22, New York

Dear Ted:

It was a great pleasure to talk with you during the NAEB Convention in Philadelphia. I appreciate your sending me the list of films and kinescopes that are available in your instructional television film library.

I would certainly like to have the opportunity of viewing several sample films during the next couple of months at your convenience. The following would be of particular interest:

1. DNA Molecule and Reproduction. Philadelphia Schools and C.B.C.
2. The Endless Adventure. Assoc. Rediffusion
3. Mine is Heavier. France
4. Kabuki. Japan
5. American History 11th Grade. MPATI.

As I mentioned during our discussion in Philadelphia, the NAEB Committee on Instructional Television (of which I am chairman) has had a project to make available to television teachers and directors, examples of television instruction on 16mm film or kinescope. There seems to be a great deal of interest in having such examples available so that directors and teachers can gather new ideas and raise the general standards of instructional television. There is an interest furthermore in having examples from various instructional levels - elementary, secondary, college undergraduate and post graduate (e.g., in-service teacher training, adult education and professional training(doctors).

In this connection the committee would like to publicize in the NAEB Newsletter such films and kinescope recordings as are already available for loan to others. Would you be willing to have your list so publicized?

Secondly, the committee would like to encourage you to expand your collection to include examples of college level instruction and perhaps post-graduate instruction. It is thought that in addition to having complete lessons available, it would also be extremely useful to have collections of excerpts from lessons. These might be assembled on the basis of several different classifications - e.g., (1) methods of presenting various subjects via television (history, literature, psychology, etc.), especially those which do not lend themselves to easy visualization, and where the "talking face" tends to predominate at present, and (2) ways of using different kinds of visual materials in varied subject areas (e.g., charts and diagrams, demonstrations, models, the chalk board, the overhead projector, slides and films, guests or discussion groups, etc.).

It is believed that such films would be invaluable for workshops, faculty meetings and for work with individual television teachers. The new regional libraries of recorded televised instruction may be willing to cooperate in lending tapes in order to record sections on kine.

Such collections of excerpts would of course necessarily carry their own sound, additional information could be provided in printed form.

Our committee hopes that you would be interested in expanding your present project along the lines proposed above. We would give you all possible personal assistance.

Sincerely yours,

L. P. Greenhill
Associate Director

P.S. I have ordered for you a print of our sample kine showing programmed algebra on television.

Ford Foundation

July 16, 1963

Dr. Herold C. Hunt
Consultant to the Foundation
Ford Foundation
477 Madison Avenue
New York 22, New York

Dear Dr. Hunt:

Enclosed is an application to the Ford Foundation for a grant to permit the National Association of Educational Broadcasters to conduct a series of national and regional workshops designed to improve the competence of personnel engaged in instructional television. The proposed project would run for three years.

We discussed this project with Ted Conant during the time we were preparing the proposal, and he suggested that we send it to you.

We will appreciate your consideration of this project, and we will be happy to supply any more detailed information you may want.

Sincerely,

Harold E. Hill

HEH/mlm
Bloc: Ted Conant

MAB-
File-
Land IV

July 15, 1965

Dr. Charles McIntyre
Director, Office of Instructional Resources
205 South Goodwin
University of Illinois
Urbana, Illinois

Dear Mac:

I have talked to Dick Bell and he will come in for the meetings on the evening of the 28th and will stay over until the 30th. I have reserved a room for each of you at the Mayflower.

I told Dick that you might want to get together with him that evening for dinner. You might want to drop him a note telling him when you plan to get here. He has no phone at his home in Canada. However, you can either write to him, or send him a telegram (which he would get in two days) asking him to call you and he would go into town and call. His address is:

Richard Bell
c/o Slim Colberg
RR #1
Carling Bay
Nobel, Ontario, Canada

Regards,

Harold E. Hill

HEH/mlm

NATIONAL ASSOCIATION OF EDUCATIONAL BROADCASTERS

NAEB

MEMORANDUM

TO: Charles McIntyre
Leslie Greenhill
Edward Stasheff

FROM: Harold E. Hill

DATE: July 17, 1963

Enclosed is the final copy of the proposal as sent in to Dr. Herold Hunt at the Ford Foundation.

You all received a copy of the proposal I sent to Ted Conant - basically Charlie's proposal with modifications and additions suggested during our phone conversation. Ted didn't call me for about a week, at which time he indicated that both he and Dr. Hunt had looked at the proposal. He had several suggestions to make, primarily to beef up a few sections of the request, plus a couple of suggested items to be deleted from the budget, since the Foundation wouldn't approve them anyway.

The staff had discussed this proposal at some length - in the form that I sent it to Ted - so we also had decided on some minor changes. After talking to Ted, I called and asked Eddie Stasheff to prepare a couple of additional pages for me (because Ted had said there should be more emphasis on what had been accomplished by the workshops Ford had already sponsored, especially the one Eddie ran), which he very kindly did.

I then took Eddie's additions, plus material I had written as a result of my conversation with Ted and our staff discussions, and put the whole thing together in the attached form. I should add that Les sent in a few suggested, minor changes after receiving the original draft from me, and these were incorporated into the final proposal.

So you can see that this was a real committee effort, and you all have our most sincere thanks for the fine style in which you have come to NAEB's assistance in this matter. Now, all we can do is wait and see what happens.

Thanks again to all of you for your wonderful help.

HEH/mlm

WGH-FF

July 16, 1963

Dr. Herold C. Hunt
Consultant to the Foundation
Ford Foundation
477 Madison Avenue
New York 22, New York

Dear Dr. Hunt:

Enclosed is an application to the Ford Foundation for a grant to permit the National Association of Educational Broadcasters to conduct a series of national and regional workshops designed to improve the competence of personnel engaged in instructional television. The proposed project would run for three years.

We discussed this project with Ted Conant during the time we were preparing the proposal, and he suggested that we send it to you.

We will appreciate your consideration of this project, and we will be happy to supply any more detailed information you may want.

Sincerely,

Harold E. Hill

HEH/nlm

A Proposal to the Ford Foundation for a Grant to Support a Series of Workshops on The Improvement of Televised Instruction

Submitted by the

National Association of Educational Broadcasters
1346 Connecticut Avenue, N.W.
Washington 36, D.C.

I. Purpose

The purpose of the proposed project is to support a series of annual workshops on instructional television with emphasis on the improvement of televised instruction at all levels.

The workshops will be under the general sponsorship of NAEB and will be held in each instance at an appropriate educational institution where facilities exist for viewing and producing instructional television programs and where reasonably priced accommodations are available.

Those attending the workshops will pay for their own travel and accommodations. Supporting funds will be used for planning meetings, honoraria and travel for invited consultants, demonstration and production costs, cost of administration, and publication and distribution of printed proceedings.

It is believed that a series of such workshops will do much to raise the general level of televised instruction, which is enjoying a period of rapid expansion and growing acceptance; consequently, now is the time to put emphasis on improvement of the quality of ITV.

The NAEB has recently completed an extensive survey of the availability and competencies of individuals upon whom the successful development of instructional television must depend. The study clearly proves -- as competent observers have long suspected -- that there is a wide gap, even considered in numerical terms, between the present and anticipated availability of people who can plan, prepare, produce and use instructional television, and the known requirements for such people. (1)

(1) Developing Human Resources for Educational Television, National Association of Educational Broadcasters, Washington, D.C., 1963.

It has been said that the body of human knowledge doubles every ten years, consequently the teacher's job becomes increasingly difficult and complex. To help the teachers, more and more schools are turning to the use of the new media, especially television. In addition to the thousands of schools reached by educational television stations, nearly 500 schools and school systems have installed closed circuit television systems. This mushrooming growth of instructional television has created a tremendous demand for personnel qualified to utilize the medium properly for instructional purposes. The number of teachers and production personnel so trained is woefully inadequate, and this shortage has resulted in a crisis not unlike the teacher-training crisis of the 1950's.

The qualitative aspects are even less encouraging. There are many individuals performing essential tasks at all levels in instructional television whose preparation has been inadequate. This fact does not constitute an indictment of the individuals concerned nor of the institutions which trained them. Rather, it is merely symptomatic of the extremely rapid application of a familiar medium in an unfamiliar context. Thus one find individuals with sound preparation in all aspects of broadcasting and the development of programming for mass audiences who have little familiarity with pedagogy or the psychology of learning upon which the success of their efforts ultimately depends.

Conversely many educators who are heavily involved in instructional television have no specific understanding of the art and craft of organization of course content and its specific application to the media for systematic learning.

Unfortunately, some others have been pressed into service before being adequately trained for either broadcasting or education. The traditional programs of training TV production people are alone insufficient. Emphasis needs to be put on those factors which influence motivation and learning both in the production and utilization of instructional television programs.

A two-pronged attack upon this problem is needed. One, for the long pull, is to encourage colleges and universities of the country to develop new programs in their schools of education and departments of communication, or modify present ones, in order to provide adequate training for those who will staff instructional television in the future. The NAEB has been working in this area for some time, and will continue to do so. As a result of the aforementioned personnel survey, the NAEB is planning to conduct a national conference of educational administrators and educational broadcasters to determine how curricula in schools of education and departments of communication can be improved and updated to provide the necessary college training for the teachers and broadcasters who will be using instructional television. Teacher training institutions will be involved in this conference, which will be followed by consultation, provided by the NAEB, with institutions to bring about the needed curriculum changes. Funds for this project are now being sought. The second approach to this problem -- and the object of the present proposal -- is to develop effective in-service training programs for those who now constitute the staff and faculties which plan, operate, prepare and utilize ITV.

Some progress has already been made in training teaching and production personnel in the better utilization of instructional television (as outlined in more detail below). While this has been quite useful, there is still a pressing need for further intensive training at this time for the following reasons:

1 - The personnel utilizing instructional television is not static and new people are entering the field constantly.

2 - The field itself is changing. There are more types of instruction being done by television, greater numbers of pupils are being taught in this manner, television formats for different subject matter are being changed and improved, there is now a more diversified approach to the uses of television in instruction, and, as new school systems in various parts of the country begin to use television, pupils with different backgrounds and different degrees of preparedness are being taught by television. All of these factors increase the need for up-to-date training of personnel in the field.

As mentioned above, some progress has already been made. Several diverse and varied programs have made themselves manifest in the last two years, and all have contributed to the pursuit of excellence in studio and classroom.

Just a bit over a year ago the Ford Foundation sponsored a widespread production workshop in Toronto, with the cooperation of the CBC and the Ryerson Institute. American delegates to this meeting came largely from the TV operations associated with the National Program in the Use of Television in the Schools. This workshop

was conducted on an extremely high technical level, and the average representation consisted of one producer and one studio teacher from each educational operation. The excellent experience offered could reach only a relatively small percentage of potential consumers.

About two months ago the NAEB organized a similar workshop at the University of Illinois, with an approach that was less oriented to studio participation and demonstration, and more concerned with the viewing and analysis of previously produced and recorded telelessons. The attendance exceeded everyone's expectations and clearly revealed the need for such a service. While some 200 were in attendance and represented ITV operations from Maine to California, the benefits of the workshop were still made available to a small number of those who needed the training.

A month ago the Foundation offered a workshop at the University of Michigan, building on the most successful features of the Toronto meeting, and attended by seventy delegates and fifteen observers, representing some thirty American institutions, with additional observers from Canada, the United Kingdom and Australia. Many more observers wished to come, but could not be accepted for reasons having to do with limited accommodations and meeting space. The methods and approaches used were based on evaluations of the Toronto and Urbana meetings, since the organizers of the Ann Arbor session had participated in one or both of the others, and additional suggestions had arisen from several short, one-day meetings on the local level sponsored by various NAEB Regions. Nevertheless, many producers and directors lamented that their graphics and scenic design people, for example, had not been able to attend to share in

the sessions. Clearly, national conferences in central locations would seem to be the springboards for local and regional workshops which would draw upon the personnel, materials and methods of the larger sessions.

It is felt that a three-year plan of NAEB workshops would take into consideration the need to provide models for regional meetings which could be attended by more teachers, producers and studio personnel. Changing approaches would meet the needs of the many teachers who will be entering the field of instructional television in the next three years. As more and more school systems adopt the use of open or closed circuit TV, we are likely to see a minor personnel explosion. More and more classroom teachers are certainly going to be exposed to television; more and more studio teachers and producers (who may or may not have had commercial experience or academic training, but are less likely to have had experience with ITV) will be employed. Thus the mushrooming growth of ITV will create a need for trained personnel, for pre-service and in-service preparation of teachers, and for the development of an understanding of the relationship between television and other elements in the rapidly changing educational technology of the middle 1960's.

The NAEB recognizes the fundamental impetus which the Ford Foundation by its grants has given to ITV and appreciates the outstanding examples of in-service training which it has supported. It believes, however, that the NAEB, as the professional association most directly concerned, should clearly assume the initiative for

long-range leadership. In order to facilitate this, the NAEB directors have developed and will present for ratification by the members in the fall a plan of re-organization under which a Division of Instruction will be formed. This Division will be open to all institutional members using television for instruction, it will have equal voice with other Divisions in the management of the NAEB, and it will be semi-autonomous in developing and implementing programs for the improvement of instructional broadcasting. Analogous to the present organization of the NAEB, the Division of Instruction will have six regional sub-groups.

II. Proposal

It is proposed that the Division of Instruction of the NAEB initiate a series of national and regional production-utilization workshops which will consist each year of a national workshop conceived primarily as a leadership-training program for individuals who, subsequently, will be responsible for organizing and conducting workshops in their home regions. Such a series of workshops will be ideal for feeding in new ideas and avoiding the stereotyping of ITV programs.

According to this proposal, in each of the three years 1964-1966 a workshop of several days duration will be held at an appropriate location. While generally open to all who may wish to attend, these workshops will be designed primarily for that group of people who occupy positions of leadership in each of the six NAEB regions and who can be expected to return to their regions to plan and conduct similar, but more intensive, programs. These would be

attended by operating personnel at all levels.

The national meetings will be planned by a committee composed of representative leaders in the various aspects of instructional television and will include individuals who have already directed successful workshops and seminars such as those that have been held at Toronto, Ann Arbor, North Carolina and Urbana. Judicious selection of the planning committee will help to insure programs of value to producers, studio teachers, administrators and classroom teachers at all levels of education, and to capitalize upon the experience of previous workshops.

Outstanding theorists and practitioners of television instruction will be invited to present papers and demonstrations and to constitute the staff of the workshop which will offer a concentrated program both in educational theory and advanced practicum in regard to the production and utilization of television for instruction. The goal will be to present the best in current practice, to demonstrate and discuss promising new approaches, and especially to present an integrated conception of the planning production-utilization chain, including the use of related media.

Actual demonstration procedures will be established, whereby studio-teacher and curriculum-supervisory participants will plan and produce lessons, under the guidance of consultants, in the studio. These will be carried by closed-circuit TV to classrooms where classroom teachers and administrators, also under the guidance of consultants, will work with students in the proper utilization of the TV lesson. ITV production personnel will, simultaneously, be

receiving instruction in the best production methodology for ITV through participation in the demonstrations.

Special emphasis will be placed on the coordinated use of various electronic media in a cross-media or systems approach to instruction. Consultants will demonstrate how overhead projectors, slide and film projectors, programmed instruction, etc., may be used in conjunction with TV. In this vein, use will be made of already existing examples of the coordinated use of the various media, such as the series of films, video tapes, acetate transparencies for the overhead projector, and a variety of other aids developed in Dade County, Florida, and distributed on a county-wide basis to train teachers and production staff.

The demonstration lessons at the proposed national workshops will be videotaped, and later transferred, where necessary, to kinescope or film for use at the regional workshops. In addition, participants in the national workshops will develop ideas for continuing programs of utilization training to be initiated both at the regional level and in their own institutions.

In other words, the national and regional workshops are designed to provide a coordinated and continuing training experience. The national workshops will establish standards and methodology in the planning-production-utilization chain and will provide materials for use at the regional level. The regional workshops will provide specific "how-to-do-it" instruction for the teachers and production personnel actively engaged in the use of instructional television, based on the standards, methodology, and materials provided by the national workshops.

There have already been regional workshops held under a variety of auspices at the University of Nebraska, the University of New Hampshire, the Des Moines Public Schools and others. These have provided excellent experiences for the personnel involved, but there was no coordinated approach as is herewith proposed.

Specialists in inter-media learning would be included among the consultants to discuss not only the related use of the various media, but also to speak on general learning theories and how these may be applied to ITV and the other related media.

Participants in the workshops would be asked to bring kinescoped or videotaped examples of outstanding or unusual instructional programs for screening and discussion by the workshop group. This would probably include some complete programs and some excerpts of unusual value from other programs. In addition, an effort would be made to secure a few outstanding examples of foreign instructional TV programs for screening and discussion by the workshop participants.

As a corollary to the demonstrations outlined above, each interest group among the participants would be given specialized instruction. Studio teachers would be given help in how to prepare, research, plan and present lessons. They would also meet with studio producers so that each group would have an opportunity to learn more about the problems of the other. Sessions on techniques would be held for these groups, including, perhaps, discussion of staging and lighting and graphics, especially as applicable to ITV.

It is expected that consultants and the workshop director will meet for several days prior to each workshop to develop detailed plans for the demonstrations and other teaching sessions so that all might be presented to the participants as an integrated whole.

Concurrently, inter- and intra-regional planning sessions will be held in preparation for the regional programs that will follow later in the year.

In general the regional workshops will be organized and staffed by NAEB members who have attended the national workshop. Programs of the regional workshops will be similar to the national workshop but generally more intensified. If each of these programs can be located in the regions so as not to be more than reasonable driving distance from most institutions in the region, it seems likely that a very large percentage of people concerned would attend.

As a result of the aforementioned three-day seminar at the University of Illinois, there is reason to believe that the plan presented above is entirely feasible and would have the result expected. That conference dealt exclusively with instructional broadcasting and was staffed entirely by NAEB members. Virtually all of the sessions were excellently attended and received, and an atmosphere of excitement and intellectual foment seemed to prevail throughout the meeting. All participants, including most of the speakers, paid their own expenses or were reimbursed by their respective institutions. The many favorable comments that have been received concerning the conference convince us that key people about the country in ITV will attend a well-planned workshop.

Furthermore, the NAEB has had long experience in holding regional meetings which are attended by a large number of rank and file who are usually not able to attend the national conferences.

Funds from the Ford Foundation are being requested in order to help provide outstanding experts, equipment, and demonstration

materials for three national conferences, and to supply basic operating money for three series of regional meetings. It is assumed that not only will these conferences do immeasurable good toward improving the quality of instructional television by raising the competencies of persons engaged in ITV, but that they will also demonstrate that such workshops in the future are worthy of support from individual and institutional fees.

It should be noted that the Urbana conference was not supported overtly except through the $5 fee paid by all registrants. However, these funds were only adequate to pay for publicity, to publish a report of the proceedings and to defray the cost of certain incidentals. In actuality the conference was supported primarily by individual speakers and members of the Planning Committee who donated their time, by their institutions which paid their expenses, and by the University of Illinois which made no charge for extensive use of facilities and personnel.

III. Budget

The following budget is proposed for each of the three years.

I.	National workshops		
(a)	Honoraria:	for consultants (6 @ $200)	$ 1200.
		for planning committee (10 @ $50)	500.
		for workshop director	250.
(b)	Travel:	for consultants (2 trips) (6 @ $150 x 2)	1800.
		for planning committee (2 trips) (10 @ $125 x 2)	2500.
(c)	Report		600.
(d)	Rental of production facilities (Special CCTV set-ups, related media equipment, mobile equipment) (1)		1000.
(e)	VTR's of demonstrations (with filmed or kinescoped copies for regional meetings), plus other materials (1)		1000.
			$ 8850.

II.	Regional Workshops (for each of 6 per year)		
(a)	Travel: for consultants (3 @ $100)	$ 300.	
(b)	Rental of production facilities	500.	
	Per region	$ 800.	
	Total for 6 Regional meetings (6 x $800)		$ 4,800.
	Total for year		$13,650.

TOTAL FOR THREE YEAR PROJECT (3 x $13,650) $ 40,950

(1) These modest estimates are based on the assumption that manufacturers and host institutions will cooperate.

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